

TITLE

A Study of Changes in
The Ratings of Relevant
Concepts on Semantic
Differential Scales by
Borstal Boys.

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ABSTRACT

One hundred and nine Borstal trainees, considered to be psychiatrically disturbed, were given twenty concepts to rate on the format of twenty Semantic Differential Scales before they commenced Borstal training. They were retested in the same way just before being released from Borstal. The psychological significance of the test-retest changes and their implication for Borstal training is the main theme of this study.

Testing the theoretical assumptions underlying the Semantic Differential techniques, it was found that the factorial structures of the scales did not comply with Osgood's three-dimensional model, nor did the assumption regarding the generality of factors across subjects and across concepts hold. Hence the traditional method of analysis of the Semantic Differential data was considered inappropriate. An alternative method of analysis as developed for Grid Data by Slater (1974) is given. The analysis is carried out on the differential changes observed. The constructs (scales) and the elements (concepts) are placed in relation to each other by their respective factor loadings. The amount and direction of change for each element or each construct is examined. The results are interpreted by studying the relationships between the individual elements and constructs.

Borstal training appears to have been successful in instilling in the trainees a respect for discipline, an admiration for authority, an acceptance of Borstal training as the 'bitter medicine', renunciation of aggression and their past delinquent behaviour. However, Borstal training affects the Self concept adversely, and fails to provide alternatives to the delinquent modes of behaviour. Marked variations in the impact of Borstal training are found in the sub-group data. The findings are discussed in terms of maintenance of Self esteem, adventure seeking, structure seeking and social/sexual role seeking behaviour. The efficacy of Borstal training is also discussed.

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CHAPTER I.

INTRODUCTION

I (1) DEFINING DELINQUENCY

Delinquency and crime are universally prevalent and especially rife in highly industrialised and urbanised societies. However, there seems to be no generally acceptable and agreed definition of delinquency, or delinquent behaviour. Whether or not a facet of adolescent behaviour is classed as delinquent, in fact, depends on the cultural mores, social tolerance and availability and organisation of law enforcing agencies. Furthermore, delinquent behaviour is an all-inclusive blanket term which can be applied to the whole spectrum of behaviour from "mildly juvenile" to "severely criminal" acts. Legal definition of delinquent behaviour does not necessarily correspond to the actual behaviour, nor does it always take into account the severity of the act. Thus, the attempts to define and delineate delinquent behaviour result in statements that are either too general and vague, or too narrow and imprecise.

The difficulties in defining delinquency have overshadowed a variety of possible explanations (Shore 1971, Rinsley 1978). Each theory takes a narrow view of delinquency and concentrates on a certain aspect only, while ignoring other factors. Attempts to put together various theories generally end up in a conglomeration of diverse ideas that have little scientific significance. The following statement by Rinsley (1978 p.255) shows this clearly.

"Delinquent youths are psychologically deviant, reflecting the failure to acculturate which, in turn is a result of pathogenic parenting by adults, surrogates who, themselves, had never adequately acculturated. When the wider cultural patterns and folk ways become obfuscated and fragmented, there ensues a vicious circle of individual familial and cultural determinants, of that variety of psychopathology simplistically termed juvenile delinquency.

"Juvenile delinquency is thus definable and understandable in terms of a nexus of inter-related individual, familial and socio-cultural determinants, irrespective of the specifics of symptomatic behaviour or diagnosis. The delinquent is fundamentally/

fundamentally egocentric (narcissistic) whether functioning individually or else as a member of a narcissistically self serving group."

Delinquency, especially recidivism, may be associated with serious personality disturbance requiring psychiatric and psychological treatments. It is reported that a high proportion of delinquents are referred to child psychiatric or child guidance clinics often for problems other than character disorders. The presence of neurotic behaviour and emotional disturbance is marked from an early age. An interesting study by Lewis et al (1977) shows that delinquents are more accident prone than non delinquents. Epidemiological studies (Lewis et al 1973, Balla 1974) report that a high proportion of delinquents have serious psychopathology and that former delinquents are at a high risk for subsequent psychiatric hospitalisation, and that severe forms of delinquency may transform into psychiatric illness at a later age. Koenigsberg et al (1977) found that the delinquents who later became psychiatric patients had been more recidivistic in the past and that they had committed their first offences at a significantly earlier age than those who did not develop psychiatric disturbances later on.

While it would be simplistic to equate juvenile delinquency with psychiatric disturbance, it appears, however, that an offender who shows delinquent tendencies at an early age, and persists with criminal behaviour throughout adolescence and adulthood, is more likely to have a serious underlying psychopathology while most delinquents leave delinquency behind as they grow older (after the age of 15) it is the recidivist delinquent who receives custodial sentences and is sent to corrective institutions like approved schools, detention centres and Borstals. Those delinquents who are committed to Borstals are usually serious and/or persistent offenders in their age group.

In 1978 for instance, 55% of juveniles sentenced to Borstals had/

had been convicted of burglary, 28% theft, handling stolen property, fraud, forgery, 12% violence against the person, 3% robbery and 1% sexual offences. During the same period, of the 14 - 16 age group received into Borstals, only 3% had no previous convictions, 18% one or two convictions 43% up to five previous convictions and 26% had six or more. *

I (2) BORSTAL TRAINING

Under Section 20 of the Criminal Justice Act (1948) as amended by 1961 Act, a sentence of Borstal training may be passed on a young offender aged 15 and under 21, convicted on indictment of an offence punishable with imprisonment. The minimum period of detention in a Borstal is six months and the maximum is two years from the date of sentence. Between these limits, the trainee can be released by the Prison Department on the recommendation by the Governor and the staff at the Borstal. After release from the Borstal and individual is subject to a supervision order for a period of up to two years from the date of release, during which time he must comply with the requirements specified in his licence. Failure to comply with these requirements of supervision may result in recall to Borstal; and an offender so recalled is liable to be detained until the expiration of two years from the date of his sentence, or six months from the date of the recall order.

Borstal training is a form of medium term training available for young offenders in need of remedial treatment. It is designed to achieve recovery from "established criminal habits". According to the Younger Report (1974) there were twenty six Borstals in the country, including two/

* New Approaches to Juvenile Crime (January 1980) Briefing Paper No. 3 "Some Facts about Juvenile Crime" published by Association of Directors of Social Services, British Association of Social Workers, Conference of Chief Probation Officers, National Association for Care and Resettlement of Offenders, National Association of Probation Officers, National Council of Voluntary Care Organisations and National Youth Bureau. Chairman, Baroness Faithful OBE, MA, D.Litt, Hereafter referred to as NAJC January 1980.

two Borstals with open establishments providing a total of 6,002 places (2,196 in Open Borstals, 3,806 in Closed). Most training Borstals and all open Borstals are in rural areas, housed in country houses and ex armed services camps.

It is acknowledged in the Borstal Rules that methods of training may vary as between one Borstal and another according to the needs of the inmates allocated to them. The Rules require the inmates to be allocated to Borstals as far as possible in accordance with age, character and capabilities, so as to make the best use of the training facilities available. After being sentenced to Borstal training, an offender is transferred to an allocation centre. The staff of an allocation centre makes an assessment of each young offender in the light of which the allocation decision is taken by an allocation board. The individual may be interviewed by a number of different people, including social workers, psychologists, occupational guidance officers and so on, and he may be given various psychological tests and assessment procedures. At the end of the assessment process the board takes into account the offender's background before sentence, his mental and intellectual abilities, his age, his degree of criminal sophistication and likelihood of his seeking opportunity to abscond. The trainee is allocated to a Borstal that is most suited to him.

The broad aim of Borstals has been stated in Prisons and Borstals (H. M.S.O. 1960) thus:

"The system in which each Borstal seeks an all round development of character and capacity - moral, mental, physical and vocational".

Rule 1 of the Borstal Rules lays down the general principle of Borstal training:

- "1. The purpose of Borstal training requires that every inmate, while conforming to the rules necessary for the well ordered community life, shall be able to develop his individuality on the right lines with a proper sense of personal responsibility. Accordingly, officers shall, while firmly maintaining order and discipline, seek to do so by influencing the inmates through their own example and leadership and enlisting their willing co-operation."

"2 The objects of Borstal training shall be to bring to bear every influence which may establish in the inmate, the will to lead a good and useful life on release, and to fit them to do so by the fullest possible development of their character, capabilities, sense of personal responsibility."

Borstal training aims at bringing about a development in the trainee's character and capacities, and progressively providing increasing scope for personal decision, responsibility and self control. This means inevitably, that there is more opportunity for failures of character to show up than there is in prison with its much more restricted scope for decision making. As the Borstal Rules indicate, Borstal training aims at enabling the trainee to develop as an individual. Perhaps the most important aspect is the relationship between staff and trainees. The intention is for the staff to get to know each particular trainee for whom they are responsible so that they can exert a personal influence on him. The house system was introduced for that reason and variations of that system have taken place over the years. Each Borstal is divided into houses or units for administration purposes. The house or unit is generally managed by an assistant governor who is assisted by a principal officer, a matron, two senior officers and an appropriate number of basic grade officers. The assistant governor is responsible for the general organisation, mobilising the resources and case work; his training team have responsibilities for interviewing individuals within a particular group and providing reports for the review board.

The aim is to keep houses organised for no more than fifty trainees who can be divided into two groups for training purposes. Because of the size of the Borstal population, and the shortage of staff, it has, in some cases, been necessary to have groups of as many as sixty or even seventy trainees. The organisation of the activities of each house is left as far as possible to the individual discretion, in order to allow house masters to develop their own technique.

The Borstal Rules provide for the establishment of a system of grades. Until 1972 there was a system of grades through which a trainee progressed/

progressed, gaining credit for conduct and work. Promotion from one grade to another was intended to involve extra responsibility for a trainee as well as more pay and privileges; and one of the most common forms of punishment was reduction in grade or delay in promotion to the next grade.

The daily routine at training Borstals generally includes a 40 hour working week, physical training, educational activities, some time for recreation and opportunity for reading and writing. The staff complement in Borstals is such that training and recreational association between trainees can be supported through the whole of the day and evening. In most cases a trainee works, initially, on the domestic work of the Borstal itself. According to his capabilities and the facilities available at the Borstal, he may be selected for a suitable trade and/or an educational programme and employed inside or outside the institution. Most Borstals offer a wide range of skilled and semi-skilled jobs. The principal types of employment available at male Borstals are metal work, carpentry, laundry work, textile work, concrete moulding, farming and market gardening. Recognised courses are also offered to the inmates to train as bricklayers and masons, carpenters and joiners, electricians, fitters, labourers, painters, and decorators, plasterers and plumbers. Training as cooks, bakers, gardeners and hospital orderlies is also provided. A few trainees, if considered suitable, may be allowed to seek employment outside the Borstal to work on farms and in private firms, local authorities and government departments.

The provision of education in Borstals rests primarily with the local education authority. The Home Office reimburses the authority in full for its services. Every Borstal for young men has a full time education officer recruited jointly by the Prison Department and the local education authority. He acts as adviser on all educational matters and professional teachers at Borstals are provided in consultation with the appropriate local education authorities. The educational arrangements in Borstals are inspected by H.M. Inspectors of Schools.

The Borstal Rules require that, so far as practicable, every trainee shall engage in education activities for at least six hours a week, outside normal working hours. They also provide for education within normal working hours for any inmate who is illiterate or backward. Because Borstals differ in range of trainees for which they are suitable, some establishments have a large number of trainees in need of remedial education, while at others, the need for remedial education is scarcely apparent. The Borstal Rules enable not only those who are illiterate or backward, but also any other trainee who is interested, to take part in educational activities. This enables those of sufficient educational attainment to be given the opportunity to study for G.C.E. examinations or even for an external degree.

The educational officers' responsibility includes the organisation of professional training courses. Unlike other education arrangements, this instruction is usually provided by civilian instructors who are directly employed by the Prison Department. The vocational training courses tended to be, for the most part, academically inclined, and to lead to examinations of the kind conducted by the City and Guilds of London Institute. In recent years construction industry training has been supplemented and, in some cases, replaced by vocational training in building work. They are shorter, place more emphasis on the practical side, and enable the average trainee to be transferred to outside work in the Borstal before the end of his sentence.

The means through which Borstals attempt to achieve the above stated aims are diverse and varied. The over-all organisation of Borstals ranges from the rigidly authoritarian to a comparatively relaxed atmosphere with a great deal of discussion between the staff and the inmates. In general, emphasis is laid on training and steady working habits and the arousal of interest in a job and the acquisition of skills. There are rewards and incentives for steadiness and good behaviour. Interests in team sports, athletics and other leisure activities are encouraged. Facilities are also provided for remedial teaching and the furthering of academic achievements.

Social/

Social training and counselling take place, either informally, through staff and inmate interaction in some Borstals, or more formally, in the form of group and individual psychotherapy.

I (3) EFFECTS OF INSTITUTIONAL TRAINING ON DELINQUENTS

There have been few attempts to ascertain the precise effect of a training programme on institutionalised delinquents. Judging by the follow up studies, the outcome of Borstal training is quite disappointing. The rate of reconviction following discharge from the Borstal has been reported to be as high as 70% (Cockett 1967, Cornish & Clarke 1975). In spite of more trained staff and more facilities and improved conditions within the Borstals, the success rate has remained very low. The causes of failure of Borstal training in achieving its stated aims need to be investigated. With the rapid increase in the rate of juvenile crime (8121 per 100,000 population in 1958 to 18085 in 1978) and a nearly three-fold increase in juveniles committed to Borstals (878 in 1969 to 2117 in 1978) the role of Borstal training in combating delinquency has acquired a greater importance. However, investigations into the impact of Borstal training on the delinquent and the causes of this apparent failure of Borstal to achieve its aims have been few and far between.

Nardini (1966) asserts that the traditional professional treatment programmes are too formalistic and distant for the great majority of inmates. He found that there was a general lack of motivation on the part of the inmates to improve themselves. Studying post discharge environment Reckless & Sindwani (1974) suggested that the post-institutional outcome depends on the type of environment that a delinquent returns to, rather than the type and length of the corrective training he receives. Cochrane, (1974) studying the value system that takes into account all the factors in the etiology of delinquent behaviour assumes that the successful correctional programmes should produce observable changes in the value system. The data on adolescent offenders showed that a training school experience has little impact on value system.

There have been very few attempts to study the effects of

different treatment programmes on different types of delinquents, despite the widespread awareness of the importance of such interaction between the trainee and the training. The allocation of a delinquent to a particular Borstal is, at best, left to clinical or subjective judgment. A recent work by Newcomb (1978) has attempted to study the effects of the length of the training programme and the size of the institution. Similar studies need to be carried out on psychological correlates of delinquent typologies (e.g. McKegney 1967) in order to relate the training with the type of delinquent to achieve the best results. For example, it has been suggested that, to a behavioural problem delinquent, detention is more likely to make him recidivistic than if he was put on probation. The 'taking and driving away' type of offender responds better to detention. Recidivists tend to become more aggressive after release from an institution than before. Although one cannot accept such conclusions without further evidence, the differential effect of Borstal training and its psychological impact is an important subject.

Cornish & Clarke (1975) compared the effects of two different methods of intervention at a residential institution for delinquent boys. The research, which included a two year follow up period covered the years between 1965 to 1973. Of the 280 boys allocated to the training school, 173 were considered for this particular experiment. These eligible boys were then randomly allocated between two houses - E house with 86 boys, and a control, C house with 87 boys. Boys considered ineligible, 107, did not take part in the controlled trial, but entered the school's third house, After leaving the school, each boy was followed up through official records for a period of two years, in order to obtain information about further conviction. The mean age of the boys who took part in the research was 14.3 years. The mean I.Q. was 104.5, the mean reading age was 10.5 years. There was no question of their delinquency status, they averaged 3.1 previous court appearances.

The/

*whom the staff considered would benefit from the treatment offered by their therapeutic community.

The results of comparisons between the two houses showed there was no statistically significant differences between the groups on any of the methods used, nor was there any difference between these two houses, taken together with the third house. Comparisons between the third house and the E house revealed, however, that significantly more of the boys reconvicted after release from the former, received custodial disposal. The disposal awarded might, of course, have been influenced by any reports made to the court by the school, including the amount of previous residential intervention, and the age of the offender. It is for this reason that the writers suggest that the ratings of offence seriousness may provide a more accurate assessment.

More complex analysis with reconvicted and not reconvicted as the dependent variable, produced essentially similar findings. The results confirmed that, while such features as, for example, previous history of absconding or of attendance at approved school, number of court appearances and intervals between appearances had some small predictive value as regards to the likelihood of reconviction, the house which a boy had entered had no influence. In the second analysis, only those factors to the residential situation itself - houses entered, number of days leave, total number of leave periods, absconding record at the school, length of stay in the school, were used. The results indicated that none of these variables had any significant effect on later reconvictions.

Psychotherapeutic methods which involved working with groups rather than with individuals seemed to be more relevant in an institutional context and these were used with some degree of success (e.g. Bion 1961). Using both self contained therapeutic communities and group therapy approach, the reconviction rate remains around 70%. The adequacy of successful criteria of the outcome of training is not very clear. The relevance of reconviction without any consideration of the type and kind of/

of offence committed made the results of doubtful value. The validity of using the rate of reconviction as a measure of success or failure of training or treatment programmes is also questionable. Negative findings such as these, nevertheless lead to a call for better implementation of programme principles and a more rigorous evaluation of designs to enable finer discrimination between programmes to be drawn.

The differential effectiveness of approved school regimes has been studied by various researchers. No significant differences when the reconviction rates of boys released from approved schools are compared with a control group from other schools have been established. McMichael (1974) and Craft (1965) found that an exceptionally well organised family type programme in which one junior approved school attender was placed, failed to produce better than average results. These results suggest that differences in programmes, whether in theoretical principles or in modes of implementation, fail to produce differences in outcome for approved schools populations. Certain differences in reconviction rates have been observed among some approved schools, however, and these might, on the basis of recent research, be at least partially explained by the operation, planned or unplanned, of factors in the school environment. Sinclair & Clark (1973) found that the reconviction rates for 66 approved schools were significantly associated with the schools' absconding rates, even when differences among intakes to the schools had been allowed for. Dunlop (1975) found that although there were differences in intakes, the eight schools she studied played a very large part in determining relative success rates at the end of a five year follow up period. Certain salient features of school regimes, as perceived by her respondents appeared to make a contribution towards these differences. One of her results indicated that the schools which emphasise trade-training and responsible behaviour in the schools had lower absconding and higher success rates than other schools. Despite the number of boys and/

and institutions involved in both studies, these effects were small.

Williams (1970) reported a study of three open Borstals which ran, respectively, case work, group counselling and traditional regimes. He found the case work regime to be significantly more successful than the others.

Maskin (1976) examined recidivism rate in work orientated and communication orientated juvenile delinquency programmes for boys. Both groups were matched for age, ethnic origin, educational achievement and reading scores. The results indicated a significant difference in recidivism rate in groups in both residential and after-care programmes. In each phase of in-treatment programme, recidivism was highest in the work orientated group. The results suggested that a facilitation of family interaction and communication is related closely to successful treatment of the delinquent and consequent recidivism rates. The group that provides the delinquents and the parents an opportunity to learn to communicate better appears to improve family cohesion and solidarity. Maskin suggests that newer therapeutic approaches in delinquency should concentrate on filial and family type therapies.

I(4) ASSESSING INSTITUTIONAL EFFECTIVENESS

Borstal training is primarily concerned with changing the personality of a delinquent. It aims at modifying, instilling, cultivating, and reinforcing those habits, attitudes, behaviours and skills which are thought to transform a delinquent into a non delinquent. Borstal training may be regarded as a process of relearning and reconditioning, a means to facilitate growth and development, self realisation, the resolution of complexes and conflicts, the acquisition of new modes of behaviour which might help a juvenile to lead a better and more useful life are the possibilities offered by the period of training. From whatever angle one looks at Borstal training, changes produced by it. should be reflected in manifest changes in the personality of a delinquent. There/

There should be some change reflected in the behaviour of the individual and also a concomitant change expressed in his attitudes and perceptions of the world in general. These changes should be more marked in those aspects of his personality which are thought to be causally related to delinquency and receive particular attention in a Borstal training programme. In order to determine whether or not a particular delinquent has benefited from Borstal training or not, changes in those important areas are to be studied.

Traditionally, inside the Borstal, the response of an individual to the training is determined by his outward behaviour. "Good" behaviour during the training will earn the inmate a period of remission and a consequent early release. "Bad" behaviour is punished with loss of remission and privileges, resulting in an extended stay in the Borstal. The assumption underlying this practice is that those inmates who behave well inside are being helped by the training and those who do not behave are not benefiting from the training, therefore they need a longer period of stay inside. This method of assessing a Borstal's effectiveness is not valid. Evidence suggests that there is a lack of correspondence between performance in Borstal and subsequent reconvictions (Gibbens & Prince 1965). Some studies (e.g. Rose 1954) do show that whilst those trainees who behave badly during their Borstal stay, behave badly outside, those who behave well inside, do not necessarily behave well outside.

The follow up method has been commonly used in determining the "success" or "failure" of a Borstal. A "success" is scored if the offender is not reconvicted during the follow up period and a "failure" is recorded if he is reconvicted. The follow up method has many serious shortcomings. The reconviction rate may reflect certain socio-economic and demographic factors associated with recidivism, or it may only show the/

the vigilance and attitudes of the local police and other law enforcing authorities.* Despite the obvious shortcomings, most follow up studies have used recidivism as an index of criminal behaviour and a measure of institutional effectiveness, without questioning the validity of the measure.

Recently, in a review of methodological issues in treatment of criminals, Reppucci & Clingempeel (1978) have discussed at length the doubtful status of this popular measure. They assert that recidivism rates depend not only on the criminal behaviour of an individual, but also on the discretion of the penal system, and that these two features are inextricably entangled. The 'discretionary' judgments of a penal system can affect rate of reconviction at all levels. Thus, fluctuations in the rate of recidivism may, in fact, reflect variations in the policies of the penal system and the efficacy of the law enforcing agencies. They also point out the interaction of penal policies and criminal behaviour can lead to Type I and Type II errors. Since recidivism is known only when a person is arrested, convicted and sentenced, Type I error (false positive) occurs when a person is classified as a non recidivist when he did, in fact, commit another offence. The relative probability of each type of error will vary with the stage of the penal process. At the time of re-arrest, Type I error has greater probability. In spite of the legal safeguards, an individual can be sent back to the institution on "breach/

*NAJC (1980) No. 3

In 1978, in England and Wales, the proportion of males under 17 who were cautioned was 44% of all those found guilty of, or cautioned for indictable offences in that age group. This report shows marked regional variation in police practice, as regards to cautioning of juveniles, ranging from 34% in Humberside, 35% in Greater Manchester and 36% in Cleveland to 60% in Lincolnshire, 61% in Suffolk, 65% in Devon and Cornwall, 65% in Dyfed-Powys and 67% in Essex.

"breach of probation", or "violation of parole" without going through the judicial review.

Type II error is more likely to occur as one moves further to the limitations and inconsistencies of a crime investigation system. An individual can be classified as a non recidivist when, in fact, he has committed an offence, thus criminal investigation system differences, rather than criminal behaviour differences may play a role in recidivist - non recidivist classification processes. Furthermore, all parole violations and breaches of probation not resulting in re-incarceration, may result in a person being classified as a non recidivist.

Finally, the rates of remissions, discharge and even reconviction are subject to changes in social and penal policies, to crime itself. Such variations in the attitude to criminal behaviour can effect the rate of 'success' or 'failure' of a Borstal. Follow up studies usually judge the outcome of an institution in a dichotomous way, as if the process of development, maturation and training is an all or none affair.

The 'psychological' (cognitive or attitudinal) approach to the study of effects of Borstal training would aim at investigating the changes in the perceptions and attitudes of the trainees, especially, changes caused by Borstals, in those attitudes which are endemic to delinquency. This approach has certain advantages over the behavioural and follow up methods. The psychological approach can provide a valid and objective measurement of attitudes and their intensities. It can provide a valid account of changes in the attitudes which can be ascribed to the impact of Borstal. For example, if delinquents are supposed to have a low self concept, negative attitude towards authority, adverse attitude to work, these attitudes can be tested and retested and the amount and the direction of any changes observed can be ascertained objectively. Examining attitudinal changes may be crucial in determining which aspects of the delinquent's life are influenced by Borstal training and which aspects are not. With the/

the knowledge of the differential impact of a Borstal, its 'success' or 'failure' can be reliably determined and if need be, changes could be made to make the method of training more effective. The psychological approach can also be applied to the study of individual differences in the trainees' response to the training. By studying such variations, the types of training and the types of trainee could be matched to improve the effectiveness of Borstal training. The psychological approach has its own limitations. Since there is a lack of perfect correlation between attitude and behaviour, one cannot be consistently inferred from the other. Jaspars(1978) puts it:

"The correlation between attitude and behaviour is rather low. This can be explained by other factors that also influence behaviour, and in this way, disturb the relationship between what people say and what they do." (p.276)

Wicker (1969) suggests that among the factors resulting in a lack of correspondence between attitudes and behaviour are personal factors, like other attitudes, competing motives, verbal and social abilities. Situational factors leading to a discrepancy between attitudes and behaviours other people, immature social behaviour, alternative modes of behaviour available, specification of attitudes, unforeseen extraneous events and expected consequences of various acts. However, it is plausible to assume that there exists a relationship between attitudes and behaviour which is disturbed by personal and situational factors. Furthermore, an attitude makes the corresponding behaviour more probable and vice versa.

Polarised distinctions between psychological and behavioural aspects of delinquency are thought to be artificial, and it is the interaction between the two which would seem to be central. In the orbit of this study, the 'psychological' and 'behavioural' are used to delineate the within and without aspects of the delinquent personality. Ideally, a combination of psychological and behavioural variables will provide a greater insight into the effect of Borstal training than either the psychological/

psychological or the behavioural approach. However, in this study, due to practical limitations, only the psychological approach has been used.

I(5) THE AIMS OF THE PRESENT STUDY

Broadly, the main aim of the study is to examine the psychological changes in different groups of psychiatrically disturbed delinquents that can be attributed to their experiences of Borstal training. Such changes are to be inferred from the differences in their ratings of various concepts on Semantic Differential Scales thought to be relevant to delinquency.

The objectives of Borstal, as described in the Borstal Rules are, though valid and desirable, too vague and generalised. As the Younger Report (1974 p.111) points out, they ".... require to be reintegrated in each generation in the light of changing social habits and of the new knowledge and techniques developed by the medical or social sciences".

The Borstal training programme is on the one hand, made up of specific elements such as work, physical training, education and the medical and psychiatric treatments, but also, on the other hand, embodies broad principles of approach such as providing a degree of independence, encouraging a sense of responsibility, developing constructive personal relationships and providing a kind of support not provided outside. By allowing a degree of autonomy and adopting a more tolerant approach, the staff aims at helping the trainee to preserve his dignity and enhance his self respect and, at the same time, provide a regime which will, so far as possible, free from disturbances do the least damage to the trainee's personality and be helpful to him both during his sentence and also after his release.

As stated in the Rules, the philosophy of Borstal has been good men influencing people through personal relationships. A great emphasis is placed on the personal relationships both among trainees and between them and the staff, so that the trainees develop a capacity for making relationships, as well as instilling into them/ skills and appropriate attitudes./

attitudes. Although a Borstal offers a single culture shared by staff and inmates, there is a need to discover the direction and the extent to which an individual is expected to change. The success or failure of Borstal is in achieving their objectives and this depends not only on the co-operation and motivation on the part of the staff and inmates, but also having a specific purpose which is commonly shared by everyone in the establishment.

The present study is an attempt to investigate the psychological impact of Borstal training on the inmates. The question of interest here is how does Borstal experience alter the perceptions and the attitudes of the trainees and whether these changes are in line with the expectations of the staff and the stated aims of Borstal training. Such questions can be answered, in part at least, by examining changes that Borstal training brings about in certain specific areas of the delinquent's life. For example, having spent a period of time in a Borstal, do the inmates think of Borstal training as successful in achieving its aims? Do they really appreciate the merits of ordered and disciplined life? Do they find the Borstal staff as healthy examples of a model to follow? To what extent are they really influenced by them? Does Borstal training succeed in raising the self esteem of the trainee and preserving his dignity? Does it make him more capable of developing mature relationships? How do his perceptions of his parents, family and his peer group change as a result of Borstal experience? How do his attitudes to law enforcement, authority figures, his own delinquent behaviour, his own emotional feelings change?

The study also attempts to ascertain whether a group of delinquents, selected according to a common criterion subjected to a common form of training, respond to it in the same way, or whether trainees with different personality and behavioural dispositions respond to Borstal training differently.

CHAPTER II

CAUSES OF DELINQUENCY

(A) PERSONALITY AND SOCIAL FACTORS

II(1) INTRODUCTION

In criminological literature the term 'delinquent' is usually used to refer to a younger category of offenders than the term 'criminal', but there is a considerable overlap in the age ranges of the offenders to which the terms have been applied. In general, a delinquent is an offender who is between the ages of 10 and 21 years. The relevance of age to culpability and to methods of control is recognised in the statutes of every modern legal system, although the precise chronology differs from one country to another.

The vast range of behaviours that can be considered antisocial or delinquent makes it difficult to propose a theoretical system capable of explaining the whole spectrum of antisocial behaviour. A usual research method is to compare convicted offenders with the non-convicted general population. Yet the underlying assumption in this approach that criminality is an all or nothing phenomenon does not hold. Attempts to study different types of criminals have failed because most offenders have committed a wide variety of antisocial behaviours. The versatility of the offender confounds the classifications of criminal behaviour with types of criminal.

Gibbons (1975) describes attempts that have been made to reduce the heterogeneous collection of criminal behaviours into more homogeneous units. The aims of such classifications and categorisations are firstly to understand the etiology of criminal behaviour since no single theory can account for the whole spectrum of criminal behaviour; secondly to develop differential treatment programmes in which a stratagem would be matched with a particular offender type, in order to achieve effective rehabilitation. Different typologies vary in the number of classifications used/

used from two (Hewitt and Jenkins 1946) to a large number of categories (Cohen & Short 1958).

The causal or etiological typologies look at the personality patterns identified with certain social or cultural factors that produce different kinds of law breaking. The diagnostic typologies look for a basis for treatment interventions. Other typologies look at patterns of crime, that is, criminal acts rather than criminal persons or patterns of offenders describing individuals and personality types rather than typology of offenders. Such typologies have, perhaps, been unduly vague and anecdotal and considerable difficulties might be found in reliably placing an offender within a given category. Two facts do emerge. The person who commits one type of offence is likely to commit other types of offences. There is evidence for the generality of antisocial behaviour over an individual's development with childhood antisocial behaviour being predictive of adult antisocial behaviour.

There are individuals whose antisocial behaviour cannot be explained by socio-cultural factors. Some who, given the best opportunities still are violent and aggressive, while others, living under very poor social conditions, do not resort to delinquent behaviour at all. Hence, as well as the socio-cultural causes of anti-social behaviour, there is a need to explore individual behaviour and account for individual differences and allow for different individuals to interpret and respond to social forces in unique ways.

This review is relevant to the development, sustenance and control of antisocial behaviour. The problem of control implies the questions of how much controls develop and how they may be sustained even in adverse circumstances. The present chapter reviews psychological, biological and social factors causally related to delinquent and criminal behaviour.

II(2) INDIVIDUAL PERSONALITY VARIABLES

In research on delinquency, many attempts have been made to identify individual personality variables related to delinquency. These have included searching for individual factors and patterns that may differentiate delinquent from non delinquent.

Personality factors associated with delinquents have been carelessness and disregard for instruction (Porteus 1965), psychomotor clumsiness (Gibbens 1963), daring and high frequency of risk taking behaviour (Gibson 1964). Hathaway & Monachesi (1956) found specific profiles of the MMPI were related to juvenile delinquency. They tested 4,000 multi-grade children (aged about 14 years) attending Minneapolis public schools during 1947-1949, with the MMPI and a follow up investigation made two years later. It was found that boys scoring high on certain combinations of personality scales, namely Psychopathic Deviate, Schizophrenia and Hypomania tend to become delinquent with greater than average frequency. High scores on other combinations, Social Introversion, Depression and Femininity scales were shown to be predictive of low rates of later delinquency. Personality Profiles in which the remainder of the scales were dominant were indicative of average delinquency. These three combinations of scales were termed as 'delinquent excitatory scales', 'delinquent inhibitory scales' and 'delinquency variable scales'. Further follow up studies were undertaken when the boys were 18 and 23 years of age, and it was found that these three combinations of scales were still predictive of later misconduct levels.

In another series of studies, Peterson & Quay (1961) attempted to determine the principal dimensions of personality associated with juvenile delinquency in samples of institutionalised adolescents. In order to do this they factor analysed responses to questionnaires with items (adapted from the MMPI) which had been shown to be related to delinquency. Three main factors were identified as 'the Psychopathic Unsocialised/

Unsocialised Factor', 'the Neurotic-Disturbed Factor' and 'the Subcultural-Socialised Factor'. A fourth factor, labelled 'Inadequacy-Immaturity' also emerged on occasions in their analyses. In addition to research with personality questionnaires, this series of studies also attempted to determine the personality dimensions associated with delinquency by analysing ratings of problem behaviour and case-history data, and again, the four factors described above emerged. It was concluded that there were basic personality traits whose origins and maintenance are of considerable importance in the understanding of juvenile delinquency.

In an interesting recent study relating personality characteristics to juvenile offence categories, Stott & Olczak (1978) found that 'Status Offenders' (those who are involved in actions that are an offence because of age, i.e. under 16) were more disturbed on a social maladjustment scale than a comparable group of juvenile delinquents (those who have committed offences that would be considered crimes if they were adults). However, it is not clear how the two groups were differentiated in this study. It may be that the status offenders have had longer histories of delinquent behaviour than the juvenile delinquents.

One of the main difficulties in studying personality correlates of different types of offenders is to find groups or types of delinquents that are mutually exclusive. McKegney (1967) found that the behavioural characteristics of the population can be statistically grouped into five major traits, each of which is internally consistent, distinct from other traits as representative of a significant portion of the boys studied, these traits being : 'A' Aggressive, 'F' Flight, 'C' Conformity, 'I' Isolation, and 'S' Socialisation. He also found that each of these behaviour traits can be defined in terms of a statistical association with the MMPI scales. He suggested a similar kind of approach in the study of personality patterns of juvenile delinquents that might give us/

us an increased understanding of delinquent behaviour and its treatment.

II(3) EYSENCK'S PERSONALITY DIMENSIONS

Eysenck proposes a theory of criminality based on his system of personality classification. His theory leads to a prediction that criminals will score higher than control groups on all three of the major dimensions of personality, namely: Extraversion, Neuroticism and Psychoticism. In general, results of studies (Eysenck 1970) have supported his prediction concerning Neuroticism more strongly than those concerning Extraversion. This is possibly due to the effect of imprisonment on responses to items of the latter scale, especially those relating to the socialising aspect of Extraversion. Prison life has such a curtailing effect on social intercourse that it is hardly surprising that prisoners should score low on Sociability. Eysenck (1970) has distinguished between Sociability and Impulsiveness components of Extraversion and reports that when his Extraversion scale is divided in this manner the Impulsiveness items do successfully discriminate between prisoners and controls, even when complete Extraversion Scale has failed to support the hypothesis.

Burgess (1972) asserts that if 'Neuroticism' acts as a drive, reinforcing extraverted or introverted tendencies, favouring or disfavouring antisocial conduct, then antisocial conduct of a particular kind would be found more frequently in people whose personality placed them in the high E high N quadrant. Unfortunately, in the vast majority of the studies cited for or against Eysenck, this direct prediction from the theories is not examined. What is tested is the indirect inference that, if one looks at criminals, they should have higher mean scores on E or N than the normal population, and this would only follow from the theory if

- (i) No factors other than those suggested by Eysenck were conducive to the development of criminality and therefore, most criminals could be expected to be neurotic extraverts, and

- (ii) If most individuals who were neurotic extraverts and therefore/

therefore, presumably, undersocialised, tended to end up as convicted criminals.

Burgess (1972) asserts that if one accepts the view that Eysenck's theory should only be tested by an examination of a relative preponderance of normals and criminals in the neurotic extravert (NE) quadrant, then only the study by West (1969) would yet appear to offer some relevant evidence. West showed that there were proportionately more delinquents among those individuals in the NE quadrant, while most "behaviour problem" children were found outside this group.

Burgess (1972) reports a series of experiments designed to test the hypothesis underlying Eysenck's theory. In the first study, two groups of subjects were used. The first consisted of 29 inmates from the British Columbia Penitentiary, a maximum security Canadian prison. The second was a control group of normals and was composed of laboratory assistants, hospital orderlies and mature students from a summer school. The PEN I Inventory, (Eysenck et al 1969) a revised form of the E.P.I. was given to both groups. The tests carried out on both E and N scores of prisoners and controls showed no significant differences between the two groups. However, when subjects scoring more than 12 on the E scale were assigned to the extraverted quadrant, and those scoring more than 8 on the N scale, to the neurotic quadrant, then results were found to be highly significant. Thus, the prediction that criminals were more represented among neurotic extraverted individuals was supported.

In a second study, three groups of subjects were used. The first group was a group of inmate volunteers from Pentonville Prison, an institution for short term recidivists. The second consisted of volunteers from Grendon Underwood Prison. This institution is orientated towards the treatment of inmates with behaviour disorders and/

and its population tended to score highly on neuroticism dimension. The control group consisted of employees of British Rail who had filled in the PEN as part of a systematised sample. The results showed that while both groups of prisoners are more neurotic than the controls, the Pentonville prisoners were slightly more extraverted, though not significantly so, while the Grendon inmates were significantly more introverted than the control group. This time, subjects scoring greater than 12 on E scale were designated as extraverts and those with less than 12 as introverts. Subjects scoring more than 8 on the N scale were designated as neurotics and those less than 8, as stable, and as before, when the NE cells were contrasted with all others and chi-square test applied, both groups of Pentonville and control and Grendon inmates and controls differed significantly from each other. Therefore, this study can be regarded as replication of the previous one, confirming support for Eysenck's theory.

In a third study, two groups of subjects were used. The first consisted of 62 consecutive admissions to Oxford Prison, who were serving a sentence of at least one year. The control group was composed of 74 'normal' individuals who had completed the EPI while taking part in an experiment for psychologists in Oxford and London. As before, subjects were assigned to quadrants and individuals scoring more than 12 on the E scale were classified as extraverted, those scoring less than 12 as introverted. Since the norms for EPI differ from those of the PEN, on this occasion, subjects scoring over 10 were classified as neurotic, while those with less than 10 were assigned to the stable quadrant. The results showed that the NE cell was contrasted with all others and the proportion of prisoners and controls tested by chi-square. Once again these data strongly supported the hypothesis and are consistent with the findings of the first two studies reported here and with those of West (1969). Burgess argues that Eysenck's theory should only be tested by a simultaneous consideration of the E and N dimensions and that a way of/

of combining the information from each should be established.

Burgess proposes that the propensity of committed criminal acts is equal to $E \times N$. He suggests that a new variable, designated as H (for Hedonism) should be signed for each individual, by taking the product of his E and N-scores. He predicts that among individuals scoring high on H there will be a high representation of criminals and that groups of criminals will tend to score significantly higher on H than groups of controls.

Burgess re-examined the data from the above studies and calculated H scores for each subject and the results confirmed the primary prediction. The difference between the H score in prisoners and controls was examined nonparametrically by means of Mann-Whitney U test and the results were found to be significant ($P < 0.005$).

In the second study, a comparison of these subjects whose H score fell into the highest third of the joint distribution was examined by means of the chi-square test. Again the primary prediction was confirmed. As before, the difference between H score in the prisoners and controls were examined with a Mann-Whitney test and found to be significant.

A further study was carried out in which the top third of the distribution of H score was examined. As before, differences between H score of prisoners and controls were tested by Mann-Whitney procedures and found to be significant. The secondary prediction that prisoners would tend to obtain higher H scores was strongly supported. Burgess suggests the new variable, H, as a plausible parameter of criminal tendency, and the results from these studies are extremely promising. However, the author would prefer to see the data from much larger studies which are not, in themselves, supportive of the original theory. Burgess's work implies that the criminality of most prisoners is explicable in terms other than extraversion and neuroticism, and that many/

many neurotic extraverts never become criminals. The actual proportion of criminal behaviour accounted for by the Eysenck theory must remain problematical. Burgess assigns equal weight to extraversion and neuroticism. It may be that the real differences between prisoners and controls lie in the neuroticism dimension and contrary to Eysenck's view, extraversion makes only a minor contribution.

Eysenck & Eysenck (1974) tested the hypothesis that recidivists have a higher score on P (Psychoticism), E (Extraversion) and N (Neuroticism) scales. In this study, 172 boys in a Borstal institution were administered the Eysenck's Personality Questionnaire (EPQ) and their PEN scores determined. Three years and nine months after testing, an effort was made to ascertain whether or not these boys had been apprehended and sentenced a second time, or whether no further conviction had been recorded against them. 122 boys came into the recidivist category while 56 were non recidivist by their criteria. Although the recidivist group scored highly, more highly than the non recidivist group on all the three scales, significant differences were found only on the Extraversion scale. Applying Burgess's approach of combining the two scales $H = (E \times N)$ did not significantly change the results. When they used H in combination with P to discover the extent to which they could discriminate between recidivist and non recidivist, they made three successive calculations. For the first set they took the mean scores for non recidivists plus one standard deviation and counted all the boys in either group who had one score in their set which equalled or exceeded this. 37% of the non recidivists were isolated in this manner, but 50% of the recidivists. For the second set, they used a similar standard for P and H. This time the percentages were 27% and 44%. Lastly, they counted the number of boys who scored, on P and H both, higher than the criteria. The percentage was 7 and 20. These studies too, require replication. It seems likely that other combinations could be found which/

which would give better discrimination with the small numbers, and it does seem worth while. The Eysencks conclude that there seems to be personality differences between recidivists and non recidivists in Borstal boys. These differences are particularly related to the extraversion dimension, and that P and N may also be implicated. More recently, Smith & Smith (1977) gave the EPQ to delinquents at the beginning of the probation order. Those reconvicted within one year of first testing were found to have significantly higher E scores than those who were not reconvicted, during the same period. However, in the identification of personality factors relating to recidivism, it should be acknowledged that environmental factors like employment, parental support, influence of peer group and the like, should also be taken into account as causal factors of recidivism.

II(4) STIMULUS-SEEKING BEHAVIOUR AND THE DELINQUENT PERSONALITY

To view a delinquent as a "stimulus-seeker" is a fresh development in the search for personality characteristics causally related to antisocial behaviour. According to this view, a strong need for stimulation (excitement, arousal, thrill, adventure and sensation) is a salient characteristic of the delinquent personality. The satisfaction of this need may over-ride the social, legal and moral restraints, resulting in antisocial behaviour. This view is interesting enough to deserve a separate discussion of its conception, development and its present status.

The motivational hypotheses of stimulus-seeking behaviour (Quay 1965, Thorne 1971, Zuckerman 1971) draws heavily on the motivational theory in general and the concept of optimal level of stimulation (Hebb & Thompson 1954, Leuba 1955, Berlyne 1960) in particular. According to the concept of optimal level of stimulation, too little stimulation as in perceptual isolation leads the organism to increase stimulation, while too much stimulation, as in sensory overload or high drive state, leads to/

to behaviour directed at stimulus reduction (Zuckerman et al 1964).

Studies show that perceptual deprivation is subjectively unpleasant, and if prolonged, the effect of such experiences results in severe disruption of affective and cognitive functioning (e.g. Heron 1957, Zubek et al 1961).

Hence the absence of and lack of variability of stimulation may be viewed as affectively unpleasant and strongly motivating. Quay (1965) attempted to explain psychopathic personality as pathological stimulus-seeking.

Taking this extreme and morbid form of antisocial behaviour, he offered a plausible explanation of such behaviour. His basic assertion is that:

"Psychopathic behaviour represents an extreme of stimulation-seeking behaviour and that the psychopath's primary abnormality is in the realm of basal reactivity and/or adaptation to sensory input of all types." (p.180)

The psychopath is considered, almost universally as highly impulsive, relatively refractory to the effects of experience in modifying his socially troublesome behaviour and lacking in the ability to delay gratification (Cleckley 1955, McCords 1956). Quay (1965) summarises psychopathic behaviour thus:

"His penchant for creating excitement for the moment without regard for later consequences seems almost unlimited. He is unable to tolerate routine and boredom, while he may engage in antisocial, even vicious behaviour, his outbursts frequently appear to be motivated by little more than a need for thrills and excitement."

He goes on to say

"It may be possible to view much of the impulsivity of the psychopath, his need to create excitement and adventure, his thrill-seeking behaviour and his inability to tolerate routine and boredom, as manifestations of an inordinate need for increase of change in the pattern of stimulation."

Quay suggests that the psychopath, either due to a lessened basal reactivity or an increased rate of adaptation, quite frequently finds himself in a condition of stimulus starvation. Since this condition is affectively unpleasant, he is motivated to change his affective/

affective state by seeking of stimulation. This seeking of intensity or variability of stimulation may involve transgression of both law and moral codes. Quay's formulation, though applied to an extreme form of behaviour pathology, led Zuckerman et al (1964) to study individual differences in the level of optimal stimulation and their implications for personality theory. They claimed that the need for change and intensity of stimulation would manifest in behaviour including sensory, social and thrill-seeking types of activities. Zuckerman and his co-workers developed a Sensation-Seeking Scale (SSS) later revised in 1971 (Zuckerman 1971). Factor analysis of the data produced four major factors, namely, Thrill and Adventure-Seeking (TAS), Experience-Seeking (ES) Disinhibition (DIS) and Boredom Susceptibility (BS). In a recent cross cultural and cross sex study involving British and American subjects, (Zuckerman, Eysenck & Eysenck 1978) three out of four factors were found to be reliable.

Kish & Busse (1968) found that SSS was highly correlated with educational attainment, intelligence level and perceptual-spatial and numerical attitudes. The SSS behaviour was found to correlate positively with Extraversion (Farley & Farley 1967) and negatively with age (Kish & Busse 1968) with peak age being at adolescence. Following Quay's 1965 formulation, Zuckerman found that on the SSS, psychiatric patients and schizophrenics scored lower than the normals. In other samples, SSS scores had a high positive correlation between Extraversion scores on the EPI and a need for change, thrill-seeking and change-seeking, need for autonomy and exhibitionism, with Originality on the Rorschach and drug addiction.

Thorne (1971) tested a sample of felons, delinquents and adult psychiatric patients on the SSS. Male and female subjects were analysed separately. Female psychiatric patients were significantly different from/

from felons and from delinquents; MMPI Hypomanic Scale was found to be related to male and female delinquents. Juvenile delinquents were found to have the highest score on SSS. "Personality disordered" subjects scored similarly to the delinquent group. Thorne concluded that delinquents were clearly tending to commit offences of an exciting and thrilling nature.

Zuckerman (et al 1972) reports that general Sensation-Seeking traits are related to uninhibited, non-conforming, impulsive, dominant type of extraversion, but not related to the socialisation type of extraversion. Sensation-Seeking was also found to be highly correlated with Impulsivity and Psychopathic-Deviate Scale of the MMPI. With non-clinical populations a lack of super-ego restraints with impulsive behaviour is also highly related to Experience-Seeking and the Inhibition Factor of the SSS. A high positive correlation between SSS and drug taking and sex experiences was also found in the sample. Zuckerman concludes that these behaviours are means of increasing arousal and having new experiences. Although Zuckerman claimed that the findings of the SSS were consistent with Quay's (1965) formulations described above and with Eysenck's (1967) view that Extraversion is characterised by arousal-seeking and that S.S. behaviour is closely associated with delinquent behaviour. The evidence for the latter is not entirely convincing. Shostak & McIntyre (1978) studied stimulus-seeking behaviour of three delinquent personality types, namely, Psychopaths, Neurotics and Socialised. The samples were drawn from juvenile delinquents, young adult offenders and college students. He found only limited evidence for sensation-seeking behaviour by psychopathic and delinquent types. However, the above study and the one by Thorne (1971) appear to have assumed that delinquent behaviour necessarily has a high correlation with high SSS score. This assumption seems erroneous in two respects, firstly/

firstly the SSS measures the 'desire' for stimulation, adventure, thrill and so on. The stimulus-seeking behaviour is only inferred from an individual response to questions, such as "I often wish I could be a mountain climber" (TAS). "I would like to hitchhike across the country" (ES). "I could conceive of myself seeking pleasures around the world with the 'jet set'" (DIS). "I would have preferred living in the unsettled days of our history" (BS). Secondly, the way in which an individual fulfils his need for stimulation is subject to various extraneous factors. A low 'stimulation-seeker' may steal a car for a joy ride, while a high 'stimulation-seeker' may participate in sports like hang gliding or parachute jumping. Therefore, the intensity of stimulus-seeking cannot be equated with the degree of delinquency.

However, the theoretical concepts of stimulus-seeking behaviour introduced by Zuckerman (1971) do provide plausible explanations of at least some aspects of delinquent behaviour. The Thrill and Adventure subscales of the SSS are related to arousal-seeking through physical and autonomic sensations produced by speed and danger. West (1973) reported a large proportion of his sample admitted to a number of different offences clearly aimed at seeking thrills and adventure (e.g. driving car under age 43.5%: deliberately travelling without ticket 89.5%: letting off fireworks in the street 93.2%: breaking windows of empty houses 82.2%: deliberately littering the street or pavement by smashing bottles, tipping dust-bins etc., 38.97% and overall acts of daring around 35%.)

The Experience-Seeking is related to a more moderate arousal. There is a need for varied experience and non-conformity to established ways. Drug taking is one way of seeking new experiences. Again, a large number of delinquents tend to experiment with drugs, hard and psychedelic, in order to have new experiences.

Disinhibition is more related to alcohol intake, for it effects the/

loosening of social inhibitions. The initial effects of alcohol are often described as "getting high". In West's (1973) sample, 79% of delinquents admitted drinking alcoholic drinks in pubs under the age of 18. Zuckerman (1971) suggests that this factor is also related to sexual sensations and variety seeking.

Boredom Susceptibility incorporates the need for change and variety more than any other factor. West (1977) reports that, among the delinquents' own reasons for indulging in delinquent behaviour, 'boredom' was ranked as third.

The concept of Stimulus-Seeking has been put forward as an explanation of delinquency. However, Stimulus-Seeking behaviour and delinquent behaviour are not identical for neither all stimulus seekers are delinquents nor all delinquents are essentially stimulus seekers. Yet this concept provides plausible explanations for certain types of delinquent behaviours, e.g. impulsiveness, vandalism, drinking, drug taking, acts of daring, endangering themselves and others, and so on.

II(5) PERSONALITY CHARACTERISTICS AND OFFENCE TYPE:

DRUG ABUSERS

Studies have been done on personality characteristics and types of offenders, especially the drug addicts. Silver (1977) describes the drug abuser's personality as one of passivity, immaturity in social development, uncertainty in the sexual role, a tendency to anxiety and depression, alienation from accepted social values, together with somewhat above the average intelligence and greater verbal than practical facility, and suggests that they tend to deny aggression and have greater neurotic tendencies to retreat and dream than either a normal or a delinquent population. Silver compared personality differences between drug addicts and non-addicts in two groups, the one consisting of 27 boys all of whom were resident in the drug rehabilitation unit and the other group consisting of 20 young men of approximately the same age range, who were/

were resident in a detention centre, all having had at least four court convictions without any experience of drug abuse. Both groups were given an intelligence test, MMPI (Minnesota Multiphasic Personality Inventory), DPI (Dynamic Personality Inventory) and a short Semantic Differential form. Most subjects in both groups were given full WAIS (Wechsler's Adult Intelligence Scale). It was found that while there were no differences on the Performance Scale of the WAIS, both Full Scale and Verbal Scale produced significant differences between the two groups, and the drug group scored significantly higher than the detention group ($p < .002$ for Full Scale and $p < .001$ for Verbal Scale). On the MMPI there were significant differences between the means of D scale, Hy scale, Mf scale, Pt scale and Sc scale. Similarly, the two groups differed significantly ($p < .05$) on the DPI Inventory scores.

On MMPI the profiles of the detention centre group had the two peaks on Pd and Ma of the delinquent pattern. The drug group profile was similar but had further peaks on the schizophrenic, depression, psychasthenia scales, suggesting, as other work has done, that these young people are not only alienated, but also more liable to anxiety and depression than the delinquent group. The drug group was found to be more disturbed, suggesting that it is the more vulnerable group in general. On the DPI, the drug group pattern is a high score on the scale Ep measuring a liking for passivity on the 'oral' scale in general and especially on verbal aggression and reaction against dependence, such as impulsiveness and unconventionality. The next highest scores are on narcissism (Pn) and on drive for achievement (Ph and Pi) largely at a fantasy level. They are considerably higher than the scores concerned with persistence, resistance to stress and self reliance. Scores on masculine/feminine interests were in the normal range, but in the opposite direction to what might have been expected. Scores are relatively high on the scale set to measure conscious acceptance of sexual/

sexual impulses. Scores were lowest on the Anal scale, especially on the respect for authority (Aa), love for detail and precision (Ad) and belief in rigid laws (As) and interest in creative activity was fairly high.

The profile of the detention centre group was, in many respects, similar to the drug group profile. It too has a higher score on the 'oral' than on the 'anal' scales. It too has reversed masculine and feminine interest scores. There are, however, significant differences within the oral range. The drug group is much higher on verbal aggression (Ov) and unconventionality (Ou). The detention group is less passive, less narcissistic and much less interested in creative pursuits. The detention centre profile shows less variation from the norm than the drug group profile, but the pattern is very similar when a rank order correlation is worked out between the two sets of scores. The result was a correlation of .87.

On the Semantic Differential scale, both groups evaluate their mother and their father favourably, but the detention centre boys rate the father more highly and the drug group their mother. More noticeable differences are seen in the self image. Both groups evaluate their 'self' fairly positively, accept that they are themselves and they see themselves as foolish. The most striking differences are on 'potency' and 'activity' factors. The detention centre group rating on the 'strong' peak is much higher than the drug group. They also see themselves as much more active, though this difference is just below the $p < .05$ level. Neither group sees itself as dangerous, and on the concept of 'myself as I should be', both groups have a very positive rating on all scales, but a greater proportion of the detention centre boys put more emphasis on strength and activity.

This is an interesting study of the similarities and differences between 'delinquents' and 'drug addicts' personality characteristics and the/

the findings as a whole, give a largely similar picture of these two groups of alienated young men. Both groups show the peak characteristic pattern found by other studies, i.e. the social delinquent who has not developed social roles varied greatly. The differences between the two groups seemed to lie in the great vulnerability to anxiety and depression among the drug misusers, who are more passive and have more wish for achievement at a fantasy level, and less belief in their own strength.

Kaldegg (1973, 1975) carried out a series of studies on the personality characteristics of heroin addicts. In her 1973 study, a group of 56 heroin addicts were tested in three groups, on Progressive Matrices and Wechsler Adult Intelligence Scale in the years 1963 - 1970. The majority of the subjects were of above average I.Q. From the variations on individual performances on the subtests, she inferred that they were underfunctioning and that their potential level was higher. The vocabulary level of all three groups was "above average". In her 1975 study, Kaldegg compared groups of 52 heroin dependent patients, 24 psychiatric patients and 20 controls on a number of personality tests. She found no evidence of addicts being mother dependent and father rejecting. The heroin dependent patients and controls did not differ in their valuation of father on a five point scale. The psychiatric population was found to be more negative towards mothers, the addicts and the controls were more or less the same. Similar results were found about the family. There were no significant differences between the addicts and the controls on the Extraversion scale of the Eysenck's Personality Inventory. However, addicts were significantly lower than the "normals" on the masculinity scale on Krout's (1954) 'Personal Preference' Scale and significantly higher on the femininity scale, but less so than the homosexuals. The Thematic Apperception stories of the addicts were dramatically different from those of the controls.

There has been some evidence to suggest that drug users tend towards/

towards above average intelligence. In her review of intelligence studies, Mott (1972) finds that opiate users tend to be of above average intelligence and higher than comparison groups of alcoholics, neurotics and delinquents. Cockett (1971) found that though there was a slightly higher ratio of more intelligent people among the "drug users" than controls the relationship between intelligence and extent of drug use could not be established.

II(6) BIOPHYSICAL TYPES

In the 19th Century, attempts were made to explain antisocial behaviour in terms of biological factors. Some believed that criminal behaviour signified some inborn moral deficiency that was thought to be genetically transmitted from generation to generation. Some went so far as to suggest that criminals represented a reversion to an earlier stage of man's evolution - primitive savages born into a civilised age. Others related criminal behaviour to structural and constitutional characteristics, the person being a degenerate type, sharing with the mentally subnormal, an incapacity to attain normal social standards. Attempts were made to tie psychological characteristics such as motor-coordination, inability to delay, low frustration tolerance, to biological roots, and moral deficiency was likened to mental deficiency.

Sheldon (1949) produced a typology based on the physical constitution and each of the three somatotypes, according to him, were believed to have an inborn sub-stratum of basic psychological traits (temperaments) which caused the person to respond in a particular way to environmental stimulation. Applying his findings to the criminological area, Sheldon claimed that the mesomorph (broad muscular structure) is more prone to delinquent behaviour, for temperamentally he is boisterous, affable, outgoing, yet fundamentally aggressive and undisciplined.

Glueck & Glueck (1956) applied Sheldon's system to delinquents. They compared 500 delinquent youths attending two correctional schools in Massachusetts/

Massachusetts with 500 youths who were believed to be non delinquent, from state schools in Boston. The two groups were matched for age, intelligence level, racial origin and residence in poor urban areas. The results confirmed Sheldon's claims. There were twice as many mesomorphs among the delinquents (60.1% compared to 30.7% but less than half as many ectomorphs (14.4% compared with 39.6%). The mesomorphic physique tended to be relatively more powerful and energetic, more apt to work off tensions and frustrations in action and less inhibited and submissive. It is easy to see how these traits might predispose to aggressiveness and delinquent behaviour, although of course only a minority of mesomorphs actually become delinquent.

The ectomorphs, in contrast, were characterised by a greater liability to feelings of inadequacy and inhibition rather than rebellion and delinquency. Although the degree of vulnerability to delinquency varied, the Gluecks found that the adverse social factors associated with the onset of delinquency were much the same in all types of physiques. The association between disharmony in the home and delinquency was closer in the case of ectomorphs than mesomorphs, presumably because ectomorphs are more sensitive to environmental conditions. Some of the most intractable delinquents, however, were mesomorphs, with the aggressive drive typical of their physique, but coupled with emotional instability, mental conflict and feelings of inadequacy such as more often occur in ectomorphs.

Sheldon's typing of human physique has been subject to considerable criticism, notably by Lasker (1947) & Newman (1952). It was thought that if these types originate from genetic differences, there may well be other factors like nutritional and environmental circumstances. Although Sheldon's fundamental principle that the individual physical condition has an obvious bearing on human behaviour, and, in particular, upon delinquent behaviour, has not been invalidated, the assertion that delinquency is genetically determined is, due to lack of evidence/

evidence, not generally accepted. Studies on inheritance and familial incidence of criminality (West 1963) and twin studies (Slater 1953) have failed to produce conclusive evidence that criminality is genetically determined. An infant may show certain primary patterns of reaction, but the ultimate effect on social adjustment depends upon how these tendencies are developed and modified by learning and experience.

Cleckly (1959) believed that a psychopathic personality had biological roots. Some support for his views came from studies reporting higher incidences of neurological disorders in psychopathic personalities (McCord & McCord 1956). The chromosomal XYY syndrome is believed to be associated with hyper-masculinity and poor control of aggression.

The bio-physical theories address themselves to certain tangible evidence. The antisocial behaviour of certain individuals has sometimes been found to be impermeable to change by current techniques and that certain individuals have required external control within an institutional setting. Many crimes are committed under the influence of drugs or alcohol, producing a break-down of behaviour control. Both neurological and biochemical factors appear to be relevant in evaluating the causes of antisocial behaviour.

However, the biological structure of the individual, although contributing to lack of control under certain stimulating conditions, is in no way a prerequisite for that loss of control, nor is it often a major element in determining the antisocial dimensions of the behaviour. Many traits and tendencies which are believed to be biological in origin will most likely be found to be closely tied to experience, perhaps to events, occurring in infancy (imprinting) during a critical period in maturation. The link between maturation and experience is an important factor in understanding the development of behavioural controls.

II(7) PSYCHOSOCIAL FACTORS

By far the largest group of studies in the origin of anti-social/

social behaviour deals with psychosocial factors. These studies have attempted to identify the nature and the quality of experiences that could explain the origins of delinquency.

In her book "Social Science and Social Pathology" (1959) Barbara Wootton has examined the evidence relating to twelve well known hypotheses about causes and characteristic features of crime and delinquency. Wootton found it impossible to make more than vague generalisations in support of the hypotheses considered:

"On the whole, it seems that offenders come from relatively large families. Not infrequently (according to some investigators, very frequently) other members of the delinquents' (variously defined) families have also been in trouble with the law. Offenders are unlikely to be regular churchgoers, but the evidence as to whether club membership discourages delinquency is wildly contradictory. If they are of age to be employed they are likely to be classified 'poor' rather than 'good' workers. Most of them come from lower social classes, but again this evidence as to the extent to which they can be described as exceptionally poor is conflicting, nor is there any clear indication that their delinquency is associated with employment of their mothers outside home. Their health is probably no worse than other people's, but many of them have earned poor reputations at school, though these may well be prejudiced by their teachers' knowledge of their delinquencies. In their school days they are quite likely to have truanted from school, and perhaps an unusually large proportion of them come from homes in which at (frequently unspecified) times, both parents were not, for whatever reason, living together, yet, even on these points, the findings of some enquiries are negative. And beyond this we cannot go".

Most of her conclusions are considered to be of relevance to the understanding of causes of criminal behaviour, despite the varying quality of the research studies reported. Later work confirmed its importance.

The famous Cambridge study by West and his colleagues provides an excellent example of comprehensive and longitudinal study. Over 400 boys from a densely populated working class London district were followed up from the age of 8 - 9 years to school leaving age and beyond. In the first stage, (West, 1969) the investigation dealt mainly with the early conduct/

conduct of boys as an indicator of later delinquency. The boys were classified into 'good', 'average' and 'bad' categories on the basis of a combined assessment from teachers' ratings of behaviour in school and ratings of conduct disorder made by psychiatric social workers. A follow up at the age of 11 showed that much the same group of boys were categorised as badly behaved at the two ages, and boys who had been so categorised were much more liable to juvenile court appearances at under 14 years of age. Poor conduct was found to be related to virtually all factors considered relevant to the development of juvenile delinquency.

By combining measures of inadequate family incomes, low socio-economic status, unsatisfactory housing, belonging to a large family, physical neglect of the child, neglect of the interior of the house and whether the family was supported by social agencies, the boys were classified into three groups according to whether social handicap was absent (11%) moderate (41%) or severe (48%). The combined measures of social handicap was strongly related to the conduct rating.

In the second report (1973) "Who Becomes Delinquent?" West reports the results of 10 year follow up of the sample. The aim of the study was to ascertain the extent of vulnerability of a juvenile to become a delinquent and the reasons for it. The main areas in the study were, socio-economic status of the family, parental behaviour and their attitude to discipline, home back-ground, intelligence and educational achievement and early behaviour. In all, 151 factors and their relative prevalence in both the delinquent and non delinquent groups were studied. Each factor included in this investigation represented some hypothesis or presumption about delinquents. The results showed, not surprisingly, but more convincingly, that five background factors of particular significance were, namely, low family income, large family size, parental criminality, low intelligence and poor parental behaviour. Boys affected by these five adverse background features were rendered extremely/

extremely vulnerable to delinquency. These factors also tended to interact with each other. Low income was closely linked to large family size. Large family size was significantly associated with lax and careless parental supervision. Poor parental behaviour often coincided with poor parental supervision. It reflected family conflict, and generally unsatisfactory parental attitude and discipline, both in terms of emotional quality and technique of child rearing. Among the five major background predictors, all but one were particularly closely associated with convictions of early onset, which in time were linked with the likelihood of juvenile recidivism. Criminality of parents, especially of the father, was a very significant predictive factor. This factor was not found to be related to convictions at age 14 or later. Low intelligence, as measured by non verbal tests, was just as closely associated with future delinquency or poor verbal or scholastic performance. The findings of this longitudinal study were more or less in line with other similar studies. (Glueck & Glueck 1950).

The third report on the study (West 1977) was based on a fourteen year follow up of the original sample. 389 youths were re-interviewed and the results summarised as follows:

"By the age of 21, 30% have had a criminal record. The peak age for crime was 18. After 17, while theft and burglary still predominated, aggressive crimes, drug offences and fraud began to appear for the first time. All had crime or dishonesty and the incidence of solitary offending increased with age. Two thirds of the sample, who had two or more convictions, later sustained one or more convictions as young adults. Of those first convicted at an early age, they were particularly prone to recidivism. Of those who committed the first offence under the age of 13, half of them were later reconvicted on one or more occasions at the age of 19 or 20."

West claims that the self report of these delinquents was very accurate. The motives for offence were usually rational, except for 'taking and driving away' which was ascribed to enjoyment. Delinquents tended to plan their offences carefully and non delinquents usually committed minor offences on the spur of the moment.

West/

West also reports certain differences in the character of the delinquent and the non delinquent subjects in the sample. Delinquents were found to be less conforming, less socially restrained than non delinquents in all respects. They were more immoderate in smoking, drinking and gambling and sexual habits. Delinquents tended to become violent after drinking and hence they drove more recklessly, and they were more likely to sustain injuries. They were more unthrifty, showed little interest in reading or furthering education. Their work record was less stable, although they might earn more per week than their counterparts, but the jobs usually had poor prospects. Delinquents usually mixed with all male groups of the kind that usually got into trouble. They spent more time away from home and they hung about aimlessly a lot of the time. They more often took prohibited drugs, expressed more aggressive and anti-establishment sentiments. They were more often in conflict with, or alienated from their parental homes. They were readier to adopt the dress styles and ornaments, for example, tattoos, that are associated with criminal establishments.

Generally, the picture at 18 was consistent with expectations, showing relatively poor economic backgrounds, parental upbringing and the predilection towards a wide variety of troublesome acts at school and at home. At 18, the behaviour was a continuation, an extension of tendencies already evident among delinquent juveniles. Almost half of all convictions concerned 5% of families in the study. The conviction of one member significantly increased the likelihood of other members being convicted. Criminal mothers tended to marry criminal fathers and criminal parents, of either sex, tended to produce criminal children. West also suggests the idea of transmission of vulnerability of children from deprived backgrounds. He suggests that inadequate housing, poor parental care, poor education and insufficient social welfare might help deprivation from one generation to be transmitted to another. Parental convictions/

convictions were especially prevalent in families with other adverse features such as poverty and unsatisfactory child rearing practices. Parental convictions even before the birth of a child increased the chances of criminal convictions of the child. Laxity of supervision and bad modelling could also produce delinquent habits.

Aggressive, behaviour, verbal, attitudinal and behavioural was closely related to official delinquency. Aggressive attitudes and behaviour were found to be the most distinguishing characteristics of the delinquent group. On the effects of being convicted, West found that convicted delinquents became more delinquent, and this finding supports the deviance amplification theory that criminal conviction is likely to increase rather than diminish delinquent behaviour. Convicted delinquents were found to be more deviant, socially less restrained, more hedonistic, more impulsive, more reckless and more aggressive and prone to physical violence than non delinquents. They smoked more, drank more and gambled more. They had a faster life style. They went out more, visited bars, discotheques and parties more often. They were sexually more precocious and promiscuous. They lacked any interest in educational pursuits, did not attend evening classes or read books. They earned more from highly paid, but unskilled jobs with poor prospects. They spent more, saved less and were more frequently out of work and in debt.

Their anti-establishment opinions, conflict with parents and self confessed aggressiveness were very obvious. Aggressive behaviour in early years was^a very significant, predictor of antisocial tendencies which tended to persist into later life and lead to other forms of anti-social behaviour.

West's study did not attempt to manipulate the situation experimentally. This finding might be taken to imply that delinquency is a commonplace and normal form of behaviour for young working-class males, and that an explanation should be sought, not in the individual pathology/

pathology of a small minority of offenders, but in the external factors affecting a large section of the population. In the working-class, the basic needs of the youth are prestige among peers, fun and excitement and personal possessions and are more readily achieved by his becoming a delinquent. According to this line of thought, the causes of delinquency will be found in social and political factors.

However, individual characteristics of the offender also play a large part. Convicted delinquents are not typically representative of their class. They differ from the norm in character, attitude and style of life. Convicted delinquents were found to be different from non-convicted delinquents. Conviction reveals much more than the offence. It points to a character constitution; aggressive, irregular in work habits, immoderate in pursuits of immediate pleasure and lacking in conventional social restraints. Youths with one conviction were different from those with several convictions, and the latter were conspicuously deviant in many respects.

Many of the hard core recidivists who ranked high on antisocial tendencies at 13 had been recognisably deviant from an early age, living in unhappy homes at 8, troublesome at the age of 10 at school, reported by the teacher to be aggressive at 12. An inherited temperament or disposition may possibly contribute, but lack of attention, lack of affection and lack of consistent training from parents during the formative years is probably more important. In later years, exposure to delinquent neighbourhoods, delinquent traditions, the acquisition of antisocial habits from delinquent companions and the effects of being identified with the problem groups of truants, rebels and convicted persons probably reinforce deviant styles.

An important finding is that delinquent tendencies tend to persist in families over generations. Evidently adverse factors of family background (poverty, too many children, marital disharmony and inappropriate/

inappropriate child rearing methods, parental criminality) lead to constellations of antisocial features. Young delinquent adults, by their irresponsible hedonistic attitudes and ^{by} ineffectual methods of coping with social demands tend to perpetuate social problems from one generation to the next, of these social problems, recidivistic delinquency is a more serious and lasting form.

In this chapter, various personality and social factors thought to be causally related to delinquency have been presented. In the next chapter, a discussion of developmental factors and early experiences associated with delinquency will be presented.

CHAPTER III

CAUSES OF DELINQUENCY

(B) DEVELOPMENTAL FACTORS AND EARLY EXPERIENCE

III(1) INTRODUCTION

The ability to control motor activity, to delay fulfilment of wishes and desires, to use guilt to regulate behaviour after transgression does not occur at birth but develops in a sequential order from the interaction of the maturational processes and the environment. The concept of "legal age" implies that only at a certain age does awareness of consequences of an action arise, and that only at a certain age can the person be assumed to be held responsible for his actions. Developmental theories assume a sequence of stages in the development of moral understanding. Environmental factors can delay the transition from one stage to another (Piaget 1948).

Cognitive theories are concerned with the relationship between understanding of morality and overt behaviour, and the necessary conditions for adequate moral development. Studies have shown (e.g. Aronfreed & Reber 1965) that control over overt behaviour is possible without concomitant cognitive changes, or generalisation to other situations. Cognitive theories tend to ignore the affective component in antisocial behaviour and motivation plays a minor role in their studies. Cognitive theory outlines stages in the development of control. They attempt to show why moral training and exposure to moral influences are not, in themselves, adequate for developing and understanding morality, but are effective only if a certain level of conceptualisation has been reached.

Early studies (e.g. Friedlander 1947) in attempting to determine the factors that influenced the development of a child, and resulted in delinquent and antisocial behaviour, point to complex affective elements. They focus on motivational factors, the effort to resolve concepts and the unconscious aspect of the various forces behind behaviour. They propose that/

that delinquent behaviour is a symptom, an expression of a conflict.

The aim of intervention is to resolve this conflict (need for punishment, desire to punish parents, to prove one's masculinity, etc.). Recent formulations assume delinquency to be the result of a distortion of ego functions like tolerance of frustration, ability to delay gratification, sublimation of basic impulses and evolution of self esteem.

Erikson (1956) put forward the concept of negative identity - as ego's effort to derive stability and structure through integrating the past, the present and the future into a role against society and its mores, a role seen by delinquents and criminals as preferable to the emptiness and helplessness when one has no identity. The reinforcement of this identity by significant figures in the environment is thought by Erikson to perpetuate the antisocial behaviour.

III(2) MATERNAL DEPRIVATION

Among all the theories relating delinquency to faulty early experiences, Bowlby's (1958) views have been the most influential. Bowlby claimed that maternal deprivation is a prime root, if not the prime root of persistent delinquent behaviour in both male and female children. He proposed that not only is physical separation of the mother from the child inevitably harmful to the child, but that, if it is extended beyond the age of $2\frac{1}{2}$ years, its effects are virtually irreparable. A father's role was considered to be of secondary importance.

He expounded his theory that separation of the child from his mother or mother substitute for more than 6 months during his first 5 years accounted for perhaps half of the most intractable cases of persistent delinquency. He suggested that unstable and unhappy parents who do not want their children provide the factors necessary to instil delinquency. Bowlby claims that there is abundant evidence that maternal deprivation can have adverse effects on the development of children during the period of separation, during the period immediately after restoration and/

and permanently.

The psychoanalytic theory of psychosexual development, particularly the Kleinian school, appears to have exerted a powerful influence on Bowlby's early work. The infant is initially dependent on his mother to satisfy his needs and direct his behaviour. She is the psychic organiser of his ego and super-ego. As his "object love" develops, he incorporates within himself, through the process of identification and introjection, the values and teachings of the love object. Parental ideas become ego ideals, parental prohibitions become conscience. As psychic maturation proceeds, the child can tolerate longer and longer periods of physical separation from his mother. The final development of the super-ego comes through the resolution of the oedipus complex, when the child learns to play the role appropriate for his sex.

Bowlby observes:

"Clinically, it is observed that the egos and the super-egos of severely deprived children are not developed - their behaviour is impulsive and uncontrolled their capacity for inhibition is absent or impaired They are ineffective personalities, unable to learn from experience and consequently, their own worst enemies."

Kaufman (1960) explains the behaviour of delinquents in terms of fear of separation. The child regresses to make sure he is not alone. Such a delinquent has strong instinctual energy, yet lacks sufficient ego or super-ego strength to pursue long term goals. The Gluecks (1952) report that early loss of a parent (before 5) through separation, divorce, death or prolonged absence occurred twice as frequently in the delinquent as in the non delinquent group. But the Gluecks did not indicate whether deprivation was maternal, paternal or dual (mixed). Ribble (1946) a psychoanalyst, maintains that mother is crucial for the child's social and sexual development. Goldfarb (1943) compared children staying in institutions for the first three years and then placed in foster homes with children who were fostered at birth. The institution group seemed/

seemed intellectually poorer, could not direct their behaviour to a personal goal, were emotionally immature, showed a tendency to display overt anxiety and aggression, an inability to concentrate, impudence, destructiveness and fits of temper. Spitz (1945) found differences in developmental stages of children, matched for age, in institutions from those who were with their mothers. Earle & Earle (1961) studied 100 psychiatric patients who had been separated from their mothers before the age of 6 years. They concluded that the early loss of the mother related significantly to childhood behaviour disorders and the later development of sociopathic personality. Ainsworth (1962) reported - from cases in Child Guidance Clinics - that conduct disorders, including stealing, were significantly more frequent among children from broken homes and among those in intact homes who had been separated from their mothers. Bennett (1959) found that physical parent-child separation occurred more frequently in delinquents than in neurotics, especially in early years. She studied both maternal and paternal separation and both physical and psychological relationships. She found that "interruptions" in the emotional relationship between mother and child occurred more frequently in delinquent than in neurotic children.

III(3) PATERNAL DEPRIVATION

Bowlby's maternal deprivation hypothesis dominated the horizon of delinquency theory from the early 1950's to the late 1960's. In spite of the steadily mounting evidence, the possibility of father as a causal factor of delinquency was largely treated with indifference. Nash (1965) wonders whether the relative neglect of father may, in fact, have distorted our understanding of a dynamic force in development and adversely affected the concept of the masculine role. Smith et al (1968) have shown that father's absence may have a depressing effect on children, particularly during early and middle childhood. Boys without brothers are more affected than those with brothers. Girls with younger brothers/

brothers were more affected than other girls, and only girls were more affected than only boys. Yet the literature on parental deprivation, on the whole, still emphasises the mother-child relationship. This is surprising in view of the important part that the father-child relationship is considered to play in the resolution of the oedipal conflict, and the subsequent super-ego development. The theory of maternal deprivation is not elaborated beyond the age of 5 years, and it is after this point that the super-ego goes through its critical phase of development.

Friedlander (1947) putting forward the psychoanalytical viewpoint maintains that the child, particularly the boy, develops his earliest and most decisive ideas about masculinity from the father. The oedipal conflict is resolved by the boy's identification with the father. This identification lays down the basis for an acceptable pattern of social and sexual behaviour. If a healthy father-figure is lacking, the child finds it hard to define for himself a proper social and sexual role. Deviant behaviour, aggressive and antisocial acts or homosexuality may result.

Bandura & Walters (1958) studied dependency conflict in aggressive delinquents, concentrating on adolescent boys and their parents. They found a severe break had occurred in the father-son relationship in most cases. This made identification with the father difficult, they noted, and consequently parental values were not completely internalised. Wilkins (1960) in a factor analytic study, concluded that the fourth and fifth years of a child's life were particularly significant. He suggested that maternal deprivation was an important factor in very early life and paternal deprivation important between 4 and 5 years of age.

Andry (1960) criticises the maternal deprivation hypothesis most strongly for the secondary role they accord to fathers. From his enquiry into aspects of parent child emotional relationships, he concluded that "it was the inadequacies in their father's roles rather than/

than in their mother's roles that served to differentiate delinquents from non delinquents". Andry, examining parental pathology in a sample of 80 delinquents and 80 non delinquent boys, studied the Bowlbian hypothesis that "delinquents suffered more from maternal separation than non delinquents". This was not confirmed and the findings regarding paternal and dual separation were also negative. Andry limited his "separation" to those due to illness, war-time evacuation, or the work of parents. He excluded absences due to death, divorce and separation, thus ruling out the sorts of deprivations that contribute to Bowlby's findings. Andry's investigation does not necessarily invalidate Bowlby's maternal deprivation theory as such. He pointed out that the role of both parents in the pathology of delinquency is necessary to study, rather than the role of one parent only. He also recognises the distinction between physical and psychological separation.

Seashore (1961) investigated delinquent and non delinquent boys and their parents, seeking to relate "conscience strength" in the boys to parent-child relationships and to deviant behaviour. His findings show it is difficult for a boy to develop internal standards strong enough to control antisocial behaviour if the relationship with the father was disturbed.

McCord & McCord & Thurber (1962) started with paternal separation and ended with mixed or dual deprivation. Exploring some effects of absent fathers on boys, found that the relationship between criminality and paternal absence was mainly a result of paternal absence in itself.

Gregory (1965) suggests that the lack of identification and control normally supplied by the parent of the same sex would have a greater bearing on subsequent delinquency than would any disruption in the relationship with the parent of the opposite sex. Warren & Palmer (1965) found that, in their sample of 316 delinquents, 58% were without

a father or father substitute and only 17% were without a mother or mother substitute.

Grygier et al (1969) found that although maternal deprivation had occurred in 56% of the 288 children (183 boys and 105 girls) in training schools in Ontario, it seldom occurred without some distortion in the accompanying father-child relationship. Paternal deprivation was represented in 75% of the cases, and, when fathers are totally absent, five times as frequently. However, he concludes "separation from either parent does not seem to be a single factor in delinquency; rather it is a part of the entire family situation and the pathology inherent in unstable families". On the role of the father, Grygier says "It may be that authority - symbolised by father - is even more important for healthy social development than parental love, mainly vested in mother without love, it is impossible to accept authority without authority it is impossible to channel and control one's drive".

Brigham et al (1967) suggested that different etiological factors exist for the "solitary" and the "social" delinquent, the solitary delinquent coming from sociologically normal but psychologically disturbed homes, with the reverse being the case for social delinquents. Other researchers demonstrate that delinquents view their fathers' behaviour as more pathogenic than their mothers'. Solitary delinquents report more deviant maternal behaviour than the social delinquent. Thus the former have a disturbed relationship with female authority figures and the latter with the male authority figures.

The incidence and the importance of paternal deprivation is now widely acknowledged by criminologists. However, the above studies do not elucidate the nature of the father/son relationship within the context of a developmental framework. How does this interaction take place? What are the factors that influence the child's perception of a father and how does his experiences determine a future psychosexual and social role?/

role? Attempts to answer these questions will provide us with a better understanding of the role of the father/son relationship within the context of delinquency.

Biller (1974) reviewing the studies of Father Child Relationship asserts that there is a need to modify the traditional view that the infant's attachment is usually exclusively and primarily with the mother and that the father does not become an important figure for the child until post infancy and that the individual differences in paternal behaviour can greatly influence the extent of the infant's attachment to the father. A meaningful attachment to the father can facilitate the infant's social and cognitive development.

"There are data which indicate that paternal masculinity, paternal nurturation and paternal limit setting can be important factors in the masculine development forces. However, taken separately, not one of these factors is sufficient to ensure the boy will become masculine. A boy can have a masculine father who is not very involved with the family. His father can be nurturant, but not very effective as a masculine model. The father can be very masculine and limit setting, yet not have developed a basic affectionate relationship with his son.

A warm relationship with a father who is himself secure in his masculinity is a crucial factor in the boy's masculine development. Boys who have punitive rejecting fathers or passive ineffectual fathers generally have less adequate sexual functioning than do boys who have interested, nurturing fathers who play a salient and decisive role in family interactions."

Biller acknowledges that having a father does not guarantee that the boy's sexual development will go smoothly, or not having a father means that the sexual development of the child is going to be necessarily impaired. However, it can be predicted that boys with highly available and salient fathers are, as a group, more securely masculine, particularly in terms of their sexual orientation than either 'father absent' boys or boys who have ineffectual fathers. It can also be predicted that 'father present' boys with ineffectual fathers are not more masculine, and may even be less masculine than 'father absent'.

'absent' boys.

Although the sexual development of the child is multi-dimensional, the comparison of 'father absent' boys and 'father present' boys suggests that availability of the father is an important factor in the masculine development of young boys. There is evidence that the young 'father absent' boy is more dependent, less aggressive and less competent in peer relationships than his 'father present' counterpart. He is likely to have an unmasculine self concept. The first few years of life, it seems, appear to be particularly important in masculine development and father absence during this period seems to have an especially retarding effect. If the boy becomes 'father absent' after the age of five, his sexual development appears to be much less affected than if he becomes 'father absent' early in life, particularly if the absence began in the first two years. Different aspects of sexual development are not influenced to the same extent by father absence. Sexual orientation, that is the aspect of sex role relating to self concept, seems to be most hampered by father's absence in the first few years of life. Sexual preference, and at least some facets of sexual ~~role~~ appear to be less influenced by father absence. 'Father absent' boys learn many masculine behaviours, even in the father's absence, from other males, such as neighbours, teachers and siblings who can play a very important role in the boy's masculine development.

However, a general problem with studies comparing 'father absent' and 'father present' children is that investigators have usually treated both 'father absent' and 'father present' children as if they represented the same homogeneous groups. There has been a lack of concern for the meaning of father absence or father presence; for example, there have been few attempts to ensure that a group of consistently 'father absent' boys was compared with a group of boys who have a high level and quality of fathering availability.

Investigators/

Investigators have made inferences about the effects of 'father absence' in variations in paternal behaviour on sexual development and the identification process, but measurement of hypothesised dependent variables has often been indirect or included only a very narrow range of behaviour. Data concerning a limited measure of masculinity have frequently been used to make inferences concerning all our patterns of identification and sexual development. Multi-dimensional assessment procedures are needed if we are to gain a clearer understanding of the influence of 'father absence' on the child's sexual development.

Paternal dominance in discipline, when combined with a high level of paternal affection, is strongly associated with male children's sensitivity to their moral transgressions. The father who is able to set firmly limits and can also be affectionate and responsive to the child's needs seems to be a particularly good model for interpersonal sensitivity in moral development. Holstein (1972) found that adolescents who were morally mature were likely to have fathers who were warm and nurturant and high in their own level of moral development.

Hoffman (1971) ^{a, b} supported data concerning the conscience development of children aged seven to eight years. 'Father absent' boys consistently scored lower than 'father present' boys on a variety of moral indices. They scored lower on measures of internal moral judgment, guilt following transgression, acceptance of blame, moral values and rule conformity. In addition, they were rated as higher in aggression by the teachers, which may also reflect difficulties in self control. Although the influence was less clear cut, weak father identification among 'father present' boys was also related to less elaborated conscience teaching.

The 'father absent' boy often lacks a model from which to learn to delay gratification and to control his aggressive and destructive impulses. A boy who has experienced paternal deprivation may have particular/

particular difficulty in respecting and communicating with adult males in positions of authority. The boy whose father has set limits for him in a nurturant and realistic manner is better able to accept limits for himself. There is also some evidence that perceived similarity is related to positive relationships with authority figures (Bieri & Lobeck 1959). Investigators have found that boys who receive appropriate and consistent discipline from their fathers are less likely to commit delinquent acts, even if they are gang members (Glueck & Glueck 1950).

Paternal deprivation is often presented as a contributory factor of juvenile delinquency. Many researchers have noted that father absence is more common among delinquent boys than among non delinquent boys. Glueck & Glueck (1950) reported that more than two fifths of delinquent boys were 'father absent' as compared with less than one fourth of a matched non delinquent group. McCord, McCord & Thurber (1962) found that the low class 'father absent' boys in their studies committed more felonies than did the 'father present' group although the rates of gang delinquency were not different. Gregory (1965) listed a large number of investigations linking 'father absence' with delinquent behaviour and also detected a strong association between these variables in his study of high school students. Other researchers relying on self report measures have also proposed that individuals from fatherless families are more likely to engage in delinquent behaviour (e.g. Slocum & Stone 1963).

Early 'father absence' has a particularly strong association with delinquency among males. Siegman (1966) analysed medical students' responses to an anonymous questionnaire concerning their childhood experiences. He compared the responses with students who had been without the father for at least one year during the first few years of life with those of students who had been continuously 'father present'. The 'father absent' group admitted to a greater degree of antisocial behaviour during childhood. Anderson (1968) found that a history of early/

early 'father absence' was much more frequent among boys committed to a training school. He also discovered that 'father absent' non delinquents had a much higher rate of father substitution (step father) (father surrogate, etc.) between the ages of four to seven than did 'father absent' delinquents. Kelly & Baer (1969) found that the recidivism rate among 'father present' male delinquents was 12% compared with 39% among 'father absent' male delinquents. Miller (1958) argued that most lower class boys suffered from paternal deprivation and their antisocial behaviour is often an attempt to prove that they are masculine. One of the methodological defects of studies linking father absence with delinquency is that social economic and socioculture factors are often not taken into account in comparisons with 'father absent', 'father present' children. Andry (1962) found that delinquents characterised their fathers as glum, uncommunicative and, as employing unreasonable punishment and little praise. Andry's findings are consistent with those of Bandura & Walters (1958) who reported that the relationship between delinquent sons and fathers is marked by rejection, hostility and antagonism. McCord & McCord & Howard (1963) found that a deviant aggressive father in the context of general parental neglect and punitiveness was strongly related to juvenile delinquency.

Shaffer's (1965) data also showed that delinquent boys often perceived their fathers in a negative way, compared to non delinquent boys. Delinquent boys viewed their fathers as laxer in discipline, more neglecting and generally less involved. Surprisingly, the delinquents described their mothers as more positive and loving than did the non delinquents. It is also interesting to note that Gregory (1965) found a higher rate of delinquency among boys living with their mothers, following father loss, than among boys living with father, following mother loss. Such data suggest that paternal deprivation is more of a factor in the development of delinquency than is maternal deprivation.

There/

There is considerable evidence that 'father present' delinquents are likely to have inadequate fathers who themselves find difficulty in impulse control. Jenkins (1968) from his experience in his clinic found that fathers of delinquent children are frequently described as rigid, controlling, and prone to alcoholism. McCord, McCord & Howard (1963) reported that criminal behaviour in adulthood was often found among men whose father had been criminal alcoholics and/or extremely abusive to their families. Several of the researchers have presented data suggesting a link between paternal inadequacy and delinquent behaviour (Bennett 1959, Gardiner 1959, Glueck & Glueck 1950).

Anderson (1968) suggests that infants who had little contact with their fathers were more likely to experience greater separation and anxiety from their mothers and more negative reactions to strangers. Paternal deprivation can severely interfere with the development of successful peer relationships and paternally deprived boys are often handicapped in the peer relationships because they lack a secure masculine orientation. Sex appropriate behaviour is very important in the formation of friendships among elementary school children. Hoffman (1961) has indicated that boys of mother-dominant homes had much more difficulty in their peer relationships than did boys from father-dominant homes. Paternal dominance was associated with impulsiveness and an ability to influence peers. On the other hand, self confidence, assertiveness and overall competence in peer group interactions were related to a warm father/son relationship. For boys, the presence of a masculine father, a positive father/son relationship, generally sex appropriate behaviour and popularity with peers are strongly related. The absence of a warm affectionate relationship with an adult male, during which mutual enjoyment of sex type interests and activities take place, can seriously interfere with a boy's social development. The case of the maternally over/

Over-protected boy is relatively easy to understand. The mother strongly discourages his participation in masculine peer group activities and his interests are very different from his male contemporaries. Many 'father absent' boys feel they have to continually prove themselves because of their lack of secure masculine self concepts. However, low self confidence and a high level of anxiety are not viewed as appropriate for males in our society and can lead to further interpersonal difficulties.

III(4) PARENTAL DEPRIVATION

The roles of mother and father and their causal relationship (with delinquency have been a subject of interest since the 1950's. Andry (1960) claimed that in his sample, the absence of a father was more critical for delinquents. These view-points have stimulated innumerable research studies and surveys, but in most studies the problems of parental deprivation have frequently been over simplified. The main emphasis has been on the intimate, loving and emotionally satisfying relationship between the child and his mother. This emphasis has been criticised as unjustified; both parents are needed and the father may be even more important than the mother. It has also been suggested that the harm for a child of a broken family lies in the fact that the remaining parent tends to cast the child in the role of the absent parent; the child is challenged too early and too deeply. The question is not whether one parent is more important in the child's life, nor which parent the child feels to be more loving, understanding or missed. Grygier (1969) asserts that:

"Fathers and mothers are not only people of different sexes; they represent different roles and different aspects of the child's environment. If the mother is so important that father is reduced to insignificance, it may be true that what the child mainly needs is simple unconditional affection and care, which the mother symbolises, if not necessarily actually presents But if the father is all-important for the child's character development, the child's actual needs (as opposed to the need felt) may be not so much affection and care as for kind but firm authority, for a model of a successful social role for the boy"

It/

It has been suggested by Kvaraceus (1959) that aggressive behaviour in low class male adolescents results from role anxiety. The anxiety over one's sexual role is derived from the unstable and derogatory father image presented in the home, by the absence of the father, or through continual devaluation of adult males, by low class adult females. The McCords (1958) suggest that father and his role as a sole determining factor in delinquency is not irreversible, that the effects of paternal neglect could be overcome if there was strong maternal love or consistent love orientated discipline. Thus, even if the father was a criminal, maternal love and consistent discipline tended to prevent the son from identifying with the antisocial paternal model. The problem of paternal versus maternal deprivation is thus not simply a question of the main character in the child's life, but of the aspects of human environment they represent. A number of studies preferred to have a look at parental (as opposed to maternal or paternal) deprivation as causally related to delinquency.

Koller and Castanos (1970) examined two types of offenders from prison populations. A sample of first offenders, mostly charged with convicted of less serious crimes, and a sample of long term prisoners consisting of recidivists and those convicted of serious crimes, were matched with a control group derived from the population at large, with respect to sex, age, marital status, socio-economic status and social isolation. It was found that parental loss or continued absence of one or both natural parents for at least twelve months before the fifteenth birthday was a common event amongst the prison population studied. Of the long term prisoners, 49.2% experienced parental loss compared with 35.8% of the short term and 21.97% of the controls. The figures are statistically significant. A significantly large proportion of long term prisoners reported that they had been placed or reared in remand homes, and training schools/

Schools for delinquents because they were not, or could not be controlled by their parents. The causes of parental loss among the short term first offenders were institutional separation and divorce being less common.

Ainsworth (1962) draws attention to the complexity of the antecedent conditions that have been subsumed under the term 'maternal deprivation' and pointed to the difficulties in defining the term 'parental deprivation'. Ainsworth divides the concept 'maternal deprivation' into three parts: a) insufficiency of interaction in deprivation: b) distortion in the character of the interaction without respect to its quantity: c) the discontinuity of relations brought about through separation. There were distinct differences with regard to parental deprivation between prison groups and controls, other than the loss of a mother. The prisoners had lost both parents for reasons of family break-down, separation, divorce or compulsory institutionalisation, whereas, among the general population, break-down in the family relationship was due to accidents, in particular to a father, and to a lesser extent to both parents due to death. Other common causes of parental deprivation in the general population were found to be chronic hospitalisation, separation due to war service. The parental deprivation found in the general population is largely a passive outside force, largely out of the control of the subjects concerned, with a subsequent tendency to be reared by the remaining parent, whereas, the deprivation of the prison group is largely the result of active forces, an intrafamilial event, the result of failure in interpersonal relationships within the family, which has resulted in subsequent admission to an institution. Parental loss was common and statistically significant, especially among the long term prisoners. The offenders had mostly been reared in institutions, subsequent to the loss. Parental deprivation among the prison population was the result of failure of intrafamilial relationships leading to compulsory/

compulsory institutionalisation, whereas among the normal population controls the parental loss was largely due to passive forces which led to their being reared by the remaining parent.

While no differences were detected with regard to birth order and ordinal position, the family size of the offender group was large, and an excess of male children in the families was noted. Those offenders who had experienced parental deprivation had younger parents and were, themselves, younger than their counterparts who had suffered no loss.

Wilson (1975) studying 56 families known to the Social Services Department and living in the inner ring zone of a large city, found that juvenile delinquency correlated highly with severe social handicap, as measured by an instrument scoring father's occupation, size of family, adequacy of school clothing, school attendance and parental conduct with school, and also correlated with parental criminality. These findings are in substantial agreement with those of West (1973) who suggests: "Five ~~background~~ factors of particular significance in making a boy vulnerable, namely, low family income, large family size, parental criminality, low intelligence and poor parental behaviour". The work described by Wilson gives independent confirmation of the first three of West's factors. The fourth factor, low intelligence, has been found to be significantly related to the degree of social handicap. Finally, West's fifth factor, parental behaviour, has been found to be significantly related to delinquents and non delinquents within the main sample. In the delinquent milieu in which authoritarian and repressive measures of child rearing are common, protection against delinquency appears to be a strict parental regime that limits a child's freedom of movement.

III(5) DEVELOPMENT OF SOCIAL ROLE

The development of social role has been closely associated with the concept of the Self and the relationship of the child with parents, particularly the father (Biller 1974). Disturbances of the parent-child relationship/

relationship can have seriously adverse effects on his social/sexual development. Theories of identification have stimulated a major hypothesis pertaining to the child's role development. Identification theorists attempt to account for social/sexual role development, conscience development, impulse control and adult role playing behaviour.

The Freudian view of the father's role holds the key to the social sexual development of the child. According to Freud, the normal resolution of Oedipal complex takes place when the boy identifies with his father.* The subsequent strong masculine strivings and desire to be like his father are seen as^a byproduct of his identification with his father.

Mowrer (1950) attempted to reformulate the Freudian theory in terms of learning theory concepts. He distinguishes between defensive identification by identification with the aggressor in Freudian theory and anacletic identification, identification with an adult based on fear of loss of love. The identification is supposed to develop out of a nurturant parent-child relationship and the child becomes dependent on the parent to provide nurturants and affection. As the father becomes more a source of reinforcement around the age of four, the boy imitates the father and gradually becomes masculine.

Social learning theorists stress that the model who is most likely to be imitated is the one who controls valued resources (e.g. Bandura & Walters 1963, Mussen & Distler 1959). These theorists stress imitation of observable behaviour as the main mechanism of social learning. The degree to which the father is observed to be a decision maker and controller of attractive privileges within the family will increase the probability that the children will imitate him. All theories of identification stress the importance of the father/son relationship and the boy imitating the father, although they differ in emphasis. From each theory it can be predicted that if the father was absent a young boy/

*

for full discussion see Friedlander (1947)

boy would experience difficulty in developing a sexual/social role.

Role development, an important facet of the self concept, also depends on a boy's own perception of himself as a male, and more similar to his father than to his mother. Continuing imitation of the father helps strengthen the boy's conception of himself as a male (Kagan 1958). Even if the father is absent or ineffectual, the boy may appear to be much like the father. The boy can receive much negative reinforcement for approximating his absent or ineffectual father's behaviour. This not only makes it difficult for the boy to see himself as similar to his father, it also makes the problem of sexual/social role development more likely to arise (Biller 1974).

Kohlberg's (1966) emphasises the influence of cognitive factors on the development of sexual identification and the sex role. He proposes that sex role development is a facet of the general process of cognitive development and thus accompanies the child's growing awareness of physical and social reality. Biller (1974 p.40) asserts:

"A warm relationship with the father who is, himself, secure in his masculinity is a crucial factor in the boy's masculine development. Boys who have punitive rejecting fathers, or passive, ineffectual fathers, generally have less adequate sexual functioning than do boys who have interested, nurturant fathers who play a salient and decisive role in family interactions."

In a recent study of 'father absent' and 'father present' boys, Biller (1974) concludes:

"There is evidence that the young 'father absent' boy is more dependent, less aggressive and less competent in peer relationships than his 'father present' counterpart. He is likely to have an unmasculine self concept." (p.53)

Positive father-son relationship has been associated with successful social interaction with peers and self confidence among adolescent males. (Mussen et al 1963). While negative relationship and parental deprivation is associated with poor relationship with peers (Stolz et al 1954, Leiderman 1959, Mitchell & Wilson 1967).

III(6) FAMILIAL INFLUENCES

In West's (1977) Cambridge study, parental criminality was one of the most consistently found factors in the histories of juvenile delinquents. He suggested that delinquency could be regarded as a way of life, transmitted from one generation to the next, through modelling and learning and experience. The adolescent was, on the one hand, exposed to a delinquent sub-culture and, on the other, to a certain quality of family life, conducive to criminality.

The McCords (1959) asserted that the roots of criminal behaviour lay deep in early family experiences. While they stated that cohesive homes produced fewer criminals, they contended that the influence of broken homes, per se, had been over-stressed. A quarrelsome and neglectful home, whether or not it was broken, was found to be even more conducive to criminality. Conflicts, tensions and attitudes preceding the actual break-down of the family were the most important factors, but the influence of those factors depended on the age of the child. Pre-adolescents were more affected by family breakdowns than adolescents, and passivity on the part of the parents was significantly related to criminal behaviour.

Andry (1960) in his study has made interesting observations with regard to the families of delinquents. He found that a delinquent's family was less open in showing natural overt affection. The parent-child communication was less than adequate in these families. Delinquents, for example, tended not to turn to the family for help when in trouble. The atmosphere of the home was more tense and the tension was contributed by the parents, especially by fathers. Poor relationships were not only present between parents, there was a greater incidence of quarrels between siblings motivated by jealousy and rivalry. Parents, especially/

especially fathers, were found to be more inadequate in dealing with family crises than parents in non delinquent families. Fathers were seen to perform a defective role as head of the family.

As has been discussed earlier, delinquents tend to have a poorer image of their parents than the non delinquents (Marks 1965). Their image of the 'family' is poorer than that of non delinquents.

Bhagat & Fraser (1970)^b found that delinquents and non delinquent groups differed significantly ($p < .01$) in their ratings of the concept 'home' on the evaluation factor of the Semantic Differential scales.

The delinquents showed a poorer image of home than the non delinquents.

III (6)(i) Discipline

Delinquents are described as anti-social, anti-authority, defiant, over-assertive and rebellious. Their disregard and dislike for law and order, authority and discipline are considered to be characteristic of their delinquent behaviour. Various psychological and sociological theories imply that a child's behaviour is largely influenced by parental methods of discipline. A delinquent, however, tends to defy any form of discipline and usually has a negative response to authority or to those who wish to control his behaviour. Many investigators have attempted to describe the element of parent/child relationships most closely related to the development of antisocial behaviour in an individual. One of the most obvious is discipline. It is usually believed that disciplinary measures within a family lead to the development of a self discipline. Glueck & Glueck (1964) listed discipline by father, supervision by the mother, affection from each and cohesiveness of the family as the factors most important for predicting future delinquent behaviour. McCord & McCord (1958) found that consistent discipline, either punitive or love orientated, tended to prevent criminality, while erratic punitive punishment was correlated/

correlated with every type of crime except traffic violations.

The work of Sears et al (1957) sums up the findings of many studies. Discipline is necessary in child rearing, but parents of highly aggressive children have consistently been found to be more aggressive, less warm and more inconsistent in their disciplinary techniques.

The results of harsh discipline in childhood are consistent with those found in experimental studies of punishment, namely that punishment is effective in bringing about short term conformity, but does not lead to the internalisation of moral values or behavioural control useful in other situations over long periods of time. Out of these studies in discipline, three important elements emerge: consistency, intensity and quality. Consistent discipline is more effective in producing internalisation than either extreme permissiveness or lack of consistency. The more severe the punishment, the less the probability that internalisation will later take place. With respect to quality, Aronfreed (1968) has described two kinds of disciplinary activity - verbal and physical. Attacks are sensitisation techniques which made a child anticipate punishment from an external source. The opposite, which he calls induction, is where explanation and withdrawal of affection are used to try to correct the behaviour. In this way, independence of external factors is emphasised and the self initiation aspects of self control are in the forefront. An internalised control over behaviour should follow. An uncertain pattern of discipline is more likely to produce delinquent acting out.

West (1969) found that parental methods of discipline judged "cruel", "passive or neglecting", "harsh" or "erratic" or "lax" were much more commonly attributed to boys in the socially handicapped group; the group which corresponded to the lowest social group. This/

This finding was even more relevant in relation to fathers than mothers. Though not conclusive, it indicates the predominant role of fathers in determining the social status of the family and the close relationship of socio-economic circumstances.

Parental attitudes to discipline were found to be closely correlated to boy's conduct. 'Normal' maternal discipline, for example, correlated negatively ($r = -.36$) and 'erratic' discipline correlated positively ($r = +.42$) with poor conduct on the combined rating scales of PSW's and teachers. These relationships held at all levels of income or social handicap. Maternal attitudes "cruel", "passive" or "neglecting" were also significantly related to bad conduct. This also held true at all social levels. Paternal attitude to discipline was less closely related to boy's behaviour, and the association did not reach a statistically significant level.

To explain why children who have been severely punished often show highly aggressive behaviour, Bandura & Walters (1963) proposed a theory of social learning of deviant behaviour. The violence that is reinforced in the culture and the violence to which the child is exposed during the period of his growth, and limitation and identification are important, causing him to model himself after the aggressor. The presence of an adult model with whom a child could identify is extremely important in shaping the lower class youth's behaviour. If adults are not available, individuals join gangs in what was believed was an effort to supply role models and values of their own.

But identification is not a unitary process. Kohlberg (1964) suggested that there are two types of identification. In personal identification, the person wishes to be like the parent. On the other hand, in positional identification, family figures are seen as sources of power and the wish is to usurp the parent's sexual, authoritarian or family roles. Such findings suggest that personal identification is related to moral learning, while positional identification/

identification is not. Personal identification clearly seems to be related to close contact with the person whom one respects and trusts. Kohlberg (1964) sees a close tie between personal identification and the development of feelings of guilt. In identifying with another person, one assumes the role of that other person in fantasy and becomes critical of transgressions. This is the first step in internalisation and a prerequisite in experiencing guilt.

Socialisation occurs, not only through the family, but also through other communities and institutions as well. The relationship between community and the family has been investigated. It has been found that communities where delinquency is high were lacking in integration, with less concern expressed by people for one another. The reasons for juvenile delinquency to concentrate in lower working class neighbourhoods are that these areas tend to be anomic, that is, there are no stable jobs, no long residences and no network of friends and relatives to provide stable cultural norms.

Developmental accounts of delinquents' early histories have shown that most delinquents come from a background which is primarily unstable. The instability may be emotional, e.g. parental discord, separation and inconsistent methods of discipline (Bandura & Walters 1958, 1963 : Parke 1970, 1977) or physical, e.g. high mobility, changes in environment, serious illness and the like (West 1973, 1977). This instability of psychosocial environment may result in a sense of normlessness or anomie. The concept of anomie is defined as a sociological disfunction or de-institutionalisation of social structures and values; the anomic individual is the one who perceives social structure as meaningless and experiences conflict between life goals (Meier & Bell 1959). The concept of anomie or the absence of common values and morals leading to personal normlessness and meaninglessness has been used/

used to explain deviant behaviour. (Jaffe 1969) asserts that delinquency can be viewed as a function of social anomie. Normless or inconsistent parental values tend to be common in the histories of delinquents. More recently Robinson (1978) found that children with behaviour problems and beyond the control of parents had parents who were more inconsistent in setting and enforcing values. Jaffe puts forward the concept of family anomie and normlessness, operationally defined as follows

".....confusion or absence of consensus about behavioural norms and values among primary group members. When there is disagreement or indecision among family members on how to handle life situations requiring a value decision, anomie is said to exist. When there is value confusion and ambiguity, the youngster is often forced to find his way by a process of trial and error, by social pragmatism. He cannot benefit from the experience of others, since people important to him do not present him with a consistent value code; he is pushed anxiously to initiate his own set of values to live by and this approach may frequently place him in difficulties which intensify earlier feelings."

Jaffe's formulation attempts to explain the behaviour of a delinquent as an attempt to resolve the anomic situation while seeking a consistent emotional and social structure.

III (6) (ii). Aggression

Aggression or aggressive behaviour is perhaps the most commonly listed feature of delinquency and psychopathy. Delinquency has often been defined as, and associated with, antisocial behaviour, rebelliousness, violence and hostile behaviour. A 'delinquent' and an 'offender' are often used as synonymous terms implying resentment and anger actively expressed by a youth. Various studies have emphasised the "aggressive" aspect of delinquent behaviour as the most relevant.

Woodmansey (1971) defines delinquency as "a mental state specifically characterised by a tendency to behave without regard for, or in active opposition to, the welfare of others the essence of the delinquent's condition is that he is hostile to other people. His activities/

activities do not just happen to harm others; he seems actually to wish to harm them, or at least not to mind whether he does or not."

The frustration-aggression hypothesis of Dollard (et al (1939) has been criticised as 'incomplete'. However, there is little doubt although reactions to frustration may vary under certain conditions, aggression is the most likely response. Thus, it is necessary to specify more clearly these aspects of frustration that would lead to aggressive behaviour, since, even under certain stimulating conditions, aggression does not always result.

Mulligan (et al (1963) found no connection to be discovered between the incidence of neurotic symptoms reported by mothers at an early age, and records of subsequent delinquency, children identified by teachers as "aggressively disturbed" at thirteen, had a significantly raised incidence of juvenile conviction. The maladjustment of the delinquent seemed to show his more aggressive behaviour in the form of disobedience in the class, resentment, quarrelsomeness with other children and being rough in the playground.

Gibbons (1963) found that delinquents tended to score unusually high on psychopathic scales of the MMPI which related to antisocial and aggressive behaviour. Other questionnaires show resentful and rebellious attitudes more closely associated with delinquency (Mulligan (et al, 1963).

Argyle (1961) found that the most striking feature that differentiates delinquents from non delinquents is the antisocial or psychopathic character which included attributes like cruelty, aggression, lack of perceptiveness of feelings of others, impulsiveness and rejection of authority. Hewitt & Jenkins (1946) classified delinquents as "unsocialised aggressives" - prone to cruelty, violence, revengefulness and open defiance. This group was also found to have experienced active rejection from parents as opposed to negligence.

Friedlander/

Friedlander (1947) put forward a psychoanalytical explanation of the antisocial behaviour of the delinquent. The aggressiveness of the delinquent is an expression of the unresolved oedipal conflict; the hostile feelings against the father are projected to the world at large.

Other studies, Gleucks (1950), Bandura & Walters (1958), Masters & Tong (1968) and the recent study by West, show that aggressive behaviour is one of the most important features of delinquent behaviour. West (1977) found that the delinquents were less satisfied with their status and hence displayed a greater need for goal attainment than was true for non delinquents who were more satisfied with their status.

In the Semantic material, delinquents and non delinquents differed in the intensity of aggression. The delinquents received lower ratings than the non delinquents on the TAT stories, and hence, showed a tendency to display less aggression than did non delinquents in their stories. It may be that delinquents are more aware of their aggressive feelings and the implications of expressed aggression than non delinquents. The hypothesis that delinquents are going to differ in attainment was supported by the findings of the study. The hypothesis that delinquent and non delinquent differ in aggression as defined in the investigation was also confirmed.

Howells & Wright (1978) investigated sexual attitudes of aggressive sexual offenders. Sex offenders tend to have similar attitudes to sex as others, but they are more fearful and they have low sexual confidence.

There/

There was a high correlation with impulsivity, sexual difficulties, shyness, social avoidance and social anxiety. Sex offenders were found to score significantly higher on scales measuring sexual maladjustment and anxious doubt about loss of control.

c. Guilt Feelings

The psychopath is said to have no sense of guilt about his criminal behaviour and its consequences. A sense of guilt is associated with the neurotic criminal. Like an ordinary neurotic, the neurotic criminal has a weak ego; he does not have an adequate amount of self control and foresight. Moreover, if he has a strong super-ego, he may suffer from what Freud called the "criminal form of a sense of guilt", a chronic feeling of guilt. The neurotic criminal relieves himself in actions of ^amore or less reprehensible kind. The punishment evoked by their actions provides relief from their sense of guilt. The neurotic delinquent may superficially resemble the bold carefree psychopath, but he is said to suffer from an acute feeling of guilt, just like the neurotic.

Conscience or guilt can also restrain antisocial behaviour. The tendency to such an action can be seen as a balance between the strength of impulses and restraining forces. The latter range from fear of punishment by external agencies to the feeling that a given action is 'wrong', i.e. conscience operates. 'Conscience' can be defined as that mechanism by which we judge actions to be morally acceptable or not. 'Internalised controls' are present when antisocial actions are effectively inhibited. However, a person may accept a given action as wrong and yet act contrary to his conscience. 'Guilt' may be experienced when such an action has been completed. It is doubtful whether anticipation of guilt is a restraining force before action, and it may be more accurate in such anticipatory restraints to speak of conscience operations. The knowledge of wrong doing or anticipation/

anticipation of punishment, rather than of guilt. Guilt usually comes after the deed is done, not before. Guilt can, of course, provide incentive to undo damage.

Bandura & Walters (1958) demonstrated how, in their control sample, boys felt guilty after theft, their guilt prompting them to make amends. However, anticipation of guilt did not actually forestall antisocial conduct. There was evidence that antisocial conduct was inhibited in the control group by feelings that it was wrong. In some aggressive boys, conscience before acting and guilt after acting tended to be less acutely felt than in the controls. This was related to disrupted dependency relationships and reduced the possibility that parental values have been internalised. Sporadic conscience operations did occur also in aggressive boys, though not sufficiently consistently to prevent much antisocial behaviour. Internal controls were recognised as well, in that aggressive boys were deterred from certain acts only by the likelihood of punishment, and once external threats were absent no further internal restraints occurred to make them desist. Control boys did not indulge in antisocial acts even when punishment was absent.

Marks (1965) suggests that the discordance between various studies on conscience and guilt among psychopaths reflects the fact that antisocial behaviour can occur in individuals with wide ranging degrees of conscience development and experience of guilt.

d. Attitudes Towards Authority Figures

One of the main functions of the police is to enforce the law. The police, in many cases, decide whether the law is being broken or not, and if so, they determine the precise nature of the charge (Walker 1965 p.19). The statistics with regard to the incidence and prevalence of crime depend, to a large extent, upon the vigilance of the police.

The/

The larger and more active are the police forces concerned with detecting and recording the more offences come to light (West 1967, p.34). The presence of an effective police force also seems to prevent crime. Evidence suggests that whenever the law enforcement function of the police is impaired, crimes, particularly thefts and robberies, increase. For example, during the French Revolution in 1789, following the atomic bombing of Hiroshima in 1945, during industrial strike by the police in Canada in the late 1960's, looting, robberies, thefts and muggings increased dramatically, the ordinary law abiding citizens took to crime.

The delinquent's encounters with the police are inevitable, for it is the police who detect, apprehend, bring charges and produce evidence with which to prosecute the offender. It is therefore not surprising that most delinquents resent the police and feel persecuted by them. White & Porter (1970) found that "the police" were ascribed negative values on the Semantic Differential scales by delinquents. The police were also seen as strong and threatening. Bhagat & Fraser (1970)^b found that both delinquents and non delinquents viewed the police in an indiscriminately negative manner. Their results showed that youths from similar neighbourhoods shared a common negative police stereotype. They assert that the reaction of the youths to the police is subject to demographic variables. The police are commonly seen only as the law enforcing authority. Heskin et al (1973) found that long term adult prisoners had a somewhat more favourable attitude towards the police. On the Semantic Differential scales, they rated the police as competent and successful (similar to the concept 'father'). They also saw the police as 'strong'.

III(7) i) SELF CONCEPT

The concept of 'self' has been the object of a good deal of theoretical speculation and empirical research. The concept of 'self' has/

has been used in order to explain various aspects of human behaviour. It has been a particularly significant feature of personality theories advanced by W. James (1890), G.H. Mead (1934), Adler (1925), Murphy (1947), Sullivan (1947, 1953) and Rogers (1951). Implicit or explicit in these theories is the assumption that the major motivational goals of any individuals are the maintenance, restoration or attainment of a positive self-attitude and the avoidance of negative self-feelings. To the extent that this assumption is justified, the nature of an individual's affective response to self would be expected to have more or less direct consequences for his degree of psychosocial adjustment. The experience of negative or positive self-attitudes would be accompanied by an affective state that corresponds to the direction of the self-attitudes. Such an affective state would enhance or impede adequate performance of social roles. The experience of derogating self-attitudes may lead to maladjustment, in that the individual may attempt to enhance his self-attitudes through the use of reality disturbing mechanisms or the adoption of patterns of socially defined deviance, modes of response which are generally considered maladaptive.

G. H. Mead (1934) has advanced the argument that one's image of self is influenced by the reaction of others to the self. He asserts the view that because we are members of a society (] we are able to develop a self concept. The self is seen to have a social origin and a social structure. Mead's view of self is essentially developmental in that it is not present at birth, but arises in the process of social experience and activity. The self concept of the individual develops through internalising the attitude of others towards oneself. From this ability to view oneself from a generalised viewpoint rather than from some particular role, the person is enabled to adopt an overall general image of himself. He then acts in accordance with a generalised set of expectations/

expectations and views of himself that he has internalised. Once acquired, the self concept can be modified by more information about oneself during life by discovering reactions of different people to the role one plays.

Ashworth (1979) does not regard the self concept as an integrated unitary awareness. His view of the self concept is that of a fairly fragmented structure in which each element relates to a different social role. Role theorists suggest the origin of the self arises primarily in the interaction of roles, which is the breeding ground of the self. The person learns to expect or anticipate certain actions and behaviour from other persons and, in turn, others have expectations of him. A role is an internally consistent series of conditioned responses by one member of a social situation which represents the stimulus pattern for a similarly consistent series of conditioned responses of the others in the situation. Dealing with human behaviour in terms of roles, therefore, requires that any item of behaviour must always be placed in some self-other context. (Cottrell 1942).

Rosenthal & Jacobson (1968) demonstrated how teachers' high expectations of pupils led to a significant increase in the functional level of intelligence of an experimental group. Similarly, low expectations of the teachers could worsen the academic achievement level. Frease (1972) found that there was a significant relationship between high academic performance and the self concept as capable students. However, he found that youngsters with low self concept as students had more delinquent prone friends, and among those who had a high proportion of delinquent friends also had a high delinquency rate. Several investigations have tried to account for the non delinquent and non criminal within the predominantly delinquent and criminal sub cultures with the hope that an understanding of these individuals might provide an explanation of vulnerability to delinquency. Reckless & Sindwani (1974) found that the/

the most significant feature was the self concept. An adequate self concept served to protect the non delinquent from social and cultural pressures towards antisocial behaviour. The loss of dignity and one's sense of self worth may lead to self hatred and feelings of worthlessness which, in turn, make the individual exceedingly susceptible to social pressures, among them delinquency and crime. Self esteem is thought to be a significant variable in determining whether a person would be susceptible to delinquent behaviour. Bandura & Walters (1963) found that children with low self esteem more easily imitate the behaviour of others. In line with their own theory they suggest that criminal models would therefore have a greater influence over these children. Bhagat & Fraser (1970)^b found that compared to non delinquents, delinquents have a poorer self concept on the evaluation scales of the Semantic Differential. In a longitudinal study of self concept in adolescents, Engel (1959) found that a negative self concept is not only less stable than a positive self concept, but that the former was significantly related to maladjustment. Mootori (1963) found delinquents to have significantly poorer concept of self compared to non delinquent controls. Marks' (1966) study shows that psychopaths had significantly poorer self concepts compared with obsessives and controls. They also rated themselves low on potency factor of the Semantic Differential scales.

Kaplan & Pokorny (1969) found that self derogation as shown by a negative self concept was related to anxiety and depressive feelings. It was found that 66% of the subjects among the highest self derogatory category also scored high on the depressive affect, compared with only 6% of the subjects with least apparent self derogation.

A number of studies on the self concept have also included the concept of 'Ideal Self' (i.e. how the subject "wishes to be" as opposed to how "he is"). A few studies (Bhagat & Fraser^b 1970, Mootori 1963) have/

have shown that though delinquents and non delinquents differ in their ratings of self concept, no such differences were observed in the rating of the ideal self. The discrepancy between the self and the ideal self has been suggested to be related to maladjustment. Mootori found that the discrepancy between the two concepts was greater in the delinquent group than ⁱⁿ the controls. Truax (1966) suggests that group therapy can help to bring discrepant self and ideal self concepts closer to each other and the change seems to occur in the rating of the self rather than the ideal self. Truax et al (1968) studying hospitalised mental patients, psychosomatic out-patients and institutionalised delinquents found that there was a negative correlation between self and ideal self. This incongruity was positively related to maladjustment. He also found that there was a positive correlation between increases in self/ideal self congruence and positive therapeutic outcome. The congruence was achieved particularly in delinquents by a shift in the self concept towards the ideal self. Psychotherapy, it is suggested (also by Luria 1959), improves the self concept.

Following previous research reports that adolescents who are delinquent feel inadequate in their roles and have low self esteem as compared to adolescents who fit into legitimate roles, Berman (1976) predicted that, if ratings on esteem is a valid measure, a significant negative correlation should appear between delinquent behaviour and self esteem scores. Testing 30 male delinquents who were administered a check list of their delinquent behaviour and a measure of social self esteem it was found that subjects who reported frequent delinquent behaviour tended to have low self esteem, more so than subjects who reported such behaviour infrequently. The Pearson correlation between delinquent behaviour check list scores and social self esteem was low, significant and negative.

Psychologists/

Psychologists may argue that juvenile delinquents possess low estimations of themselves due to parental rejection and deprivation, and these feelings in turn are important in producing delinquency. Those individuals who become delinquent are seeking emotional satisfaction that they could not find in their home environment. Sociologists suggest that the delinquent has joined a delinquent subculture as a solution to the problem of adjustment, often arising because of the disadvantaged position of the working class compared to the dominant middle class. This perspective places the delinquent in a special world which has its own antisocial set of meanings and values to guide perceptions, motivate actions and provide statuses and identities. Participation in this delinquent sub culture allows the delinquent to gain a high estimation of himself by engaging in the behaviour which is rewarded, even if delinquent.

Self evaluation is basically a positive or negative attitude towards the self which is made up of the individual's reactions to and his judgment of the opinions that significant others have of him. These opinions are based on the degree to which the individual fulfils the expectations of these others and the manner in which he fulfils them. The self evaluation then is the individual's awareness of his degree of success or failure in carrying out those social roles with which he identifies as his. At the same time as the individual comes to identify with delinquent others he comes to differentiate himself from non delinquent others. This dual process of identification and differentiation is basic to the validation of the identity. By engaging in these two processes, the delinquent learns who he is and who he is not. Since this learning process constitutes the announcement of a delinquent identity and a concomitant identification with the delinquent sub culture, delinquents should, for example, form associations with delinquent/

delinquent models.

The delinquent sub culture, as a set of values, beliefs and attitudes, determines the standard by which a member evaluates himself. The delinquent will judge himself by the degree to which he lives up to these standards. As the individual goes through this process of identification he comes to shift the basis of self evaluation. Those standards and the people representing those standards that provided the basis of the initial low level of self evaluation come no longer to be deemed important. The level of self evaluation can be changed from low to high through the process of identification. It seems likely, therefore, that the individual delinquent who has a strong degree of identification with the delinquent sub culture will tend to have a high level of self evaluation, while those delinquents with a weaker degree of identification will tend to have a low valuation of the self.

Since the first evaluation is determined in relation to a set of accepted standards, both non delinquents and delinquents can have a high level of self evaluation. The difference, of course, is that non delinquents judge themselves by conventional standards and delinquents by delinquent standards. On the other hand, the non delinquent who fails to live up to the conventional standard can have a lower level of self evaluation without necessarily becoming delinquent and similarly a delinquent with some degree of continuing identification with conventional standards can also have a low level of self evaluation.

Identification with the delinquent sub culture should be a better predictor of delinquent behaviour than self evaluation. Hall (1966) puts forward a three point continuum of identification in the delinquency culture for delinquency orientation:

- a. The totally committed delinquent who is completely involved in only the delinquency culture.
- b. The marginal delinquent who is involved and concerned with/

with both the non delinquent and delinquency spheres

- c. The non delinquent who is indifferent to and uninvolved with the delinquency culture.

Specifically, the totally committed delinquent should:

- a. Conceive of himself in terms of delinquency orientated roles (delinquent identities).
- b. Place high value on delinquency associates and activities (delinquent peer group orientation).
- d. Reject middle class orientation and prefer exotic occupations and the easy life.
- e. Perceive causes of crime as external to a person.
- f. Place the accent and excitement as a mode of self expression.

In addition, the totally committed delinquent should have a high concern with self preservation. The marginal delinquent maintains some presocial identities and values, but fails to realise them. The marginal delinquent experiences internal conflict as a result of these inconsistencies and contradictory identities, since he has not been able to completely detach himself from [the] conventional society and its representatives, and so make the delinquent peer group the primary reference point of self evaluation. This should be reflected in a low self evaluation.

Non delinquency represents a commitment to 'antidelinquency'. The non delinquents should resemble the self conception of the totally committed delinquent in structure. There should be a tendency for non delinquents to possess an integrated self conception and a high level of self evaluation. This type should show positive family relationships, non delinquent associates, acceptance of middle class values and represent, in sum, the opposite of the totally committed delinquent.

Using/

Using this delinquency orientation continuum, Hall examines individuals classified as essentially delinquent according to their formal legal status to establish the two hypotheses.

- a. Delinquency orientation is a better predictor of delinquency classification than self evaluation.
- b. There is a positive relationship between delinquency orientation and level of self evaluation among juvenile delinquents.

The results indicate that it is impossible to isolate empirically the representatives of the three points, totally committed delinquents, type (a), marginal delinquents, type (b), and non delinquents, type (c). Concentrating only on the totally committed and marginal types, the results demonstrated that increasing the delinquency orientation will have the effect of raising the level of self evaluation, that is, that there is a transition process from being a marginal delinquent to being a totally committed delinquent.

Farrell & Nelson (1978) present a sequential analysis of delinquency. According to the sequential model, delinquent behaviour is caused by association with delinquent groups associations which are developed in an effort to adjust to a felt rejection by society and subsequent negative self definition. Through a process of collective support, such associations develop a positive identity, leading to a more serious form of delinquency sustained by the group's insulation from external rejection.

It is suggested that an important element of deviance causation is the need to maintain equilibrium in social relationships and, therefore, to strive for a balance of social exchange. When this balance is disrupted persons experience a sense of insecurity which causes a threat to self esteem. In an attempt to maintain a positive identity they may shift reference associations from those who reject them or otherwise/

otherwise do not conform to their expectations, to others who are more accepting and rewarding in their relationships. In these terms then, it is not a negative transformation of an identity which causes movement towards a deviant group, rather it is the perceived social responses presenting a threat to the self that motivates persons to restore the equilibrium by shifting associations to others who offer more equitable exchange in interaction. Such adaptations have important consequences for future interaction with conforming others in that the new associations intensify deviancy and bring the individual into increased conflict with society. The process seems to continue in a circle, so that involvement in delinquent groups results in increasingly adopting delinquent behaviour.

III (7) (ii) SELF CONCEPT AND DELINQUENCY

Delinquents and maladjusted individuals are said to have a more negative self concept than non delinquents (Osgood et al 1957, Bhagat & Fraser 1970)^b. Borstal training appeared to have worsened the self image of the group. Norris (1977) has reported similar findings. A two month stay in a detention centre resulted in lowering of self esteem and self perception. Kaplan & Pokorny (1969) suggest that negative self concept is not only an antecedent condition of psychosocial deviance, it also has a high correlation with anxiety and depression. Tamayo & Raymond (1977) suggest that a feeling of inadequacy and worthlessness is an indication of self criticism and it can lead to a more ready acceptance of different and changed roles. Schwartz & Tangri (1965) assert that delinquents with the most stable self concept are more committed to the deviant role and those least committed to a deviant behaviour are more open to the influence of others. A delinquent with a poor self image (which also indicates high anxiety) is regarded as having a better prognosis than a delinquent with a good self image. (Schwartz & Tangri 1965). Subjects with a negative self image/

image are more amenable to changes than those whose self concepts are positive. (Engel 1959). Short (1960) supports the view that low self concept is a sign of high anxiety in delinquents, showing that they are not fully committed to their role, therefore they are more amenable to change. Delinquent behaviour is also seen as an attempt by an adolescent with a poor self concept to improve his self image (Frease 1972). In order to improve his self image, the delinquent may join other delinquents in the hope that the self will be transformed from an object of derision and worthlessness to a valued group member. As Hall (1966) points out, the success or failure of this desire depends on the degree of identification the individual has with the sub culture. The delinquent with a strong degree of identification tends to have a high level of self evaluation, whereas a weak identification has a low self concept. Jones & Swain (1977) point out that identifying with the delinquent sub culture is a more important factor in delinquency than delinquent behaviour per se.

Epstein (1973) conceives the self concept as a self theory that an individual constructs about himself. The self theory is a system of hierarchically organised postulates about himself which are generalised from experience. He argues that an individual's self theory can be evaluated in terms of the same factors used in evaluating scientific theories (in that it is extensive, parsimonious, empirically valid, internally consistent, testable and useful). An individual will experience much stress when he encounters information he cannot integrate or is in contradiction with his self postulates. A collapse of a theory he sees as healthy because it may permit a more viable self theory to be constructed. Drawing on Epstein's (1973) and Piaget's (1948) theories, Okun & Sasfy (1977) conclude that it is not until adolescence that the human organism is capable of developing a self/

self concept as a self theory for it is only after developing cognitive and formal logical operations that a viable theory can be constructed. Hence, an adolescent who has developed a poor self image generalised from experience and internalised others' responses towards him may, in the first place, subscribe to delinquency to improve his self image. Subjected to custodial training, punishment and exposure to information contradictory to his self theory, he may develop a high level of anxiety and depression and a worsened self concept.

III(8) IMPLICATIONS OF THIS LITERATURE REVIEW

In the foregoing chapters literature on the causes of delinquency has been reviewed from a variety of theoretical standpoints. Certain facts regarding the origin of delinquency emerge very clearly, for example, the relationship between adverse social factors and delinquent behaviour appears to be very close. From studies by the Gluecks and McCords in the early sixties and the recent painstaking work by West and his co-workers, it has been shown that the factors of socio-economic status, large family membership, poor parental behaviour and erratic methods of discipline are very closely linked with delinquency.

Etiological factors and deviant behaviour are highly correlated but the causal relationship between the two is still a matter of theoretical conjecture. Furthermore, no factor can be singled out as causing delinquency for it is the interaction of factors that seems more important. The role of the interaction of such factors with personality variables likely to result in delinquency has been, perhaps, somewhat underestimated in the literature. Moreover, many studies of causal factors are retrospective and therefore may present findings not altogether to be relied upon. West's study (1977) is one of the few exceptions but this study depends heavily on the self report of the delinquents and/

and this again may not be a trustworthy source of information.

From the review of the literature, it seems that a complex interaction of psychological and social factors gives rise to a subculture in which a mode of behaviour is commonly described as delinquent, anti-social or criminal. There are certain individuals who would more readily succumb to influences of this sub-culture and adopt its attitudes and normative behaviour. There are other individuals who, though not subject to adverse social conditions and hence not socialised in a prevailing delinquent sub-culture, nevertheless subscribe to it by adopting the delinquent way of life. It may be that constitutional factors and their psychological concomitants, together with certain personality traits such as extraversion, psychoticism and impulsiveness, may predispose an individual to an antisocial style of life. There is evidence to suggest the influence of these factors.

The causes of delinquency remain elusive. It is noted that the traditional approach to the etiology of crime ignores the fact that many factors that are associated with delinquency are also associated with other types of disturbances as well. Present day knowledge of the etiology of delinquency and criminal behaviour is still small - a fact that is highlighted by the general failure of the corrective methods in changing the deviant behaviours by teaching, training and treatment programmes. Perhaps this is due to the readiness with which delinquency is seen as an 'illness'. The failure to ascertain the correspondence between cause and effect is a failure of the existing theoretical models. Delinquency is used as a blanket term to envelop a wide range of anti-social behaviours defined by diverse criteria: legal, psychiatric and moral. Corrective methods also suffer from the same confusions in that a treatment training programme is assumed to help a wide variety of individuals who are put together according to artificial and somewhat invalid criteria. The identification of personality, psychosocial and environmental/

environmental factors relating to delinquency are vital in the understanding of causes of delinquency. Equally important is the knowledge of the precise interaction of these factors which are said to produce delinquency.

Group studies in delinquency have distinct advantages in that they can identify demographic and sociological variables and their relationship with the incidence and prevalence of delinquency. Studies comparing groups of delinquents with groups of non delinquents may generate valid general findings, yet the drawback here is that such results cannot be reliably applied to any one individual without extreme reservation. Individual studies, on the other hand, may provide accurate and precise information about an individual delinquent and his circumstances. Since the information is based on a narrow range of variables relating to that particular individual, the findings have limited value in the understanding of other individuals and other circumstances. In the field of delinquency in which an identifiable group is by no means homogeneous it may be more profitable to complement the group approach with the individual approach. The former may provide broad, generalised findings, and normative ranges for different variables and define the parameters within which the individual may vary in an identifiable and predictable way.

The point worth reiterating is that, unlike current trends in research in delinquency, a combination of group and individual methods of study may provide more valid findings than either one used above. Moreover, a combination of behaviour analysis approaches (which start from overt behaviour but also take into account the covert behaviour) and the psychological approach (which starts from covert behaviour and makes inference about overt behaviour) would provide a better understanding of delinquency and its treatment than either approach. The different theories of delinquent behaviour need not be considered mutually exclusive.

In/

In such an analysis the relative importance of the different variables and different factors could be established with respect to individual differences. For example, not all delinquents end up having a poor self concept. It may be of importance to know why some delinquents have a high concept of themselves and others have low self esteem, and what function does the level of self concept have for the individual. How does it affect and reinforce behaviour? Parental deprivation, so commonly found in delinquent samples, can result in one delinquent rejecting all authority and people in severe positions, yet to another, the similar experience may be resultant in a passive dependence and regressive personality. From the point of view of treatment, the crucial point is that these differences and reactions demand different remedial strategies.

Although the origin of antisocial behaviour is very complex and although such behaviour arises from many sources, planning for any corrective programme aimed to reduce criminality should strive to provide opportunities for the development of realistic feelings of self esteem, for identifying with people who can be respected and trusted, for feelings of control and mastery over the environment to develop, and for a sense of belonging to a group or social order to emerge. Such a training programme might mitigate the influences of negative early experiences. The importance of differential effects of training programmes is now being recognised. The extent and limitations need to be explored.

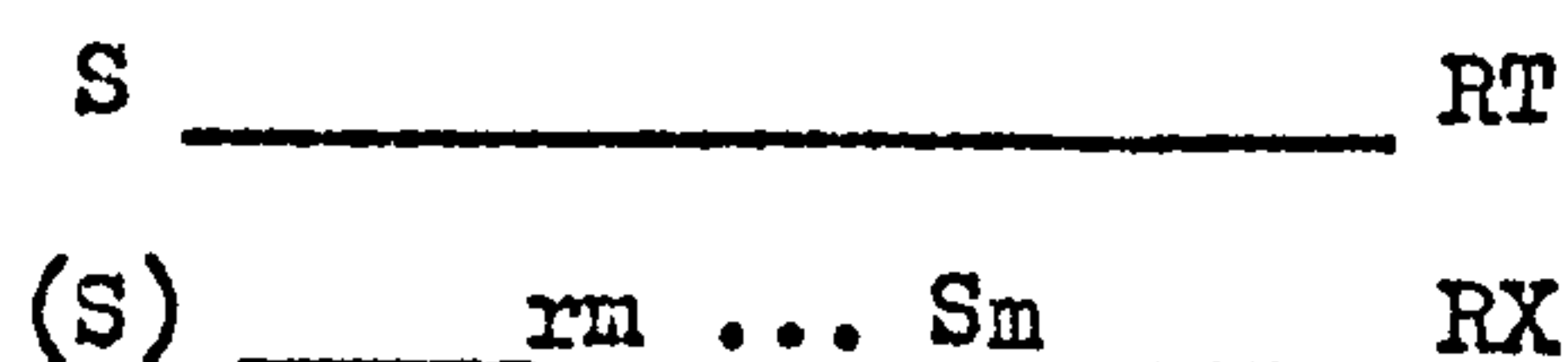
CHAPTER IV

OSGOOD'S SEMANTIC DIFFERENTIAL

IV (1) THE REPRESENTATIONAL MEDIATION PROCESS

Osgood (et al 1957) put forward their theory of Semantic Differential. The theory is a two stage mediation conception of learning and measurement technique called the "Semantic Differential". The technique measures the semantic "meanings" of objects, ideas and situations. "Meaning" here refers to the "significance", "value" or "attitude" of the objects, ideas and situations to a particular individual.

A significate "S" such as the object "Apple" is assumed to elicit a complex pattern of total behaviour (RT) including automatic as well as skeletal reactions. When some other stimulus, a potential sign (S) such as visual perception of the object "Apple" or auditory perception of the word "Apple" accompanies and antedates the significate it is assumed that this new stimulus becomes conditioned to some distinctive portion of the total object reaction, this portion coming to function in behaviour as a "representational mediation process" (rm).



This process is representational because it is part of the very same behaviour that the thing signified produces, hence its symbolic semantic property; it is a mediation process by virtue of the fact that the self stimulation it produces (Sm) can become associated with a variety of overt adaptive acts (RX) which "take account of" the thing signified. Psychological meaning is identified with such representational mediation process, and linguistic responses as a subject of RX would seem to offer the most elaborate and discriminative possibilities for measuring meaning.

Therefore, according to Osgood et al (1957) whenever a stimulus other/

other than the sign is contiguous with the sign, it will require an increment of association with some portion of the total behaviour elicited by the sign as representational mediation process. They link signs and significates through partial identity of the disposition itself, with the behaviour produced by the sign. According to their view, words represent things because they produce in human organisms replicas of actual behaviour towards these things, as a mediation process. This according to Osgood, is the crucial mechanism that ties a particular sign to a particular signicate rather than others.

"Within the general framework of learning theory, the meaning of a sign was identified as a representational mediation process - representational by virtue of comprising some portion of the total behaviour elicited by the sign and mediating because this process as a kind of self stimulation serves to elicit overt behaviours both linguistic and non linguistic that are appropriate to the things signified." Osgood et al (1957)

Variation in meaning should be particularly characteristic of signs since their representational mediation process depends entirely upon the samples of other signs with which they occur.

Thus, meaning, like emotion, is a relational and representational process.

IV (2) THE MEANING OF MEANING

The definition of "Meaning" presents enormous difficulties for each field of knowledge treats meaning from a different point of view. Various definitions of meaning are equally valid, but relevant only in their particular field of knowledge. Osgood's (1957) meanings are of three kinds:

- a. Sociological or pragmatic meanings: i.e. relation of signs to situations and behaviour.
- b. Linguistic or synactical meaning: i.e. relation of signs to other signs.
- c. Semantic meanings: i.e. the relation of signs to their significates/

significates. (Morris 1946).

Ogden & Richards (1946) stress the referential character of signs - "a symbol is correct when it causes a reference similar to that which it symbolises in any suitable interpreter". Osgood's scheme of representational mediation process was an attempt to fill in the gap between the signs and the significates.

Osgood claims that the Semantic Differential is a technique to measure the "semantic" meanings of a concept and that it is the affective or connotative meaning^{are} of the concept that is measured by Semantic Differential technique. When rating another person, the rater's task is essentially one of verbal decoding wherein he matches his interpretations of another person's personality against verbal material in the form of rating scales provided by the experimenter. (Osgood 1957).

According to the theory much decoding includes affective mediational meaning responses on the part of the rater and the inter-relations among the given set of traits and words are determined in part by such responses. Kuusinen (1969) suggests that there are, in fact, two factor structures of trait inter-relationship, one containing dominantly "Affective" dimension of personality rating and the other containing dominantly "Denotative" dimension. Kuusinen also suggests that "in other peoples' ratings of other peoples' personalities, both kinds of structures should be taken into account". Thus, Kuusinen's "theory of personality" includes Affective Evaluation, Potency and Activity components as well as more finely denotative Trustworthiness, Self-confidence, Rationality, Uniqueness, Tolerance and Sociability.

Osgood (1969) maintains that the Semantic Differential measures certain affective features of total meaning closely related to the dimensions of emotions or feelings, and that the Semantic Differential technique highlights these affective features at the expense of other semantic/

semantic features more familiar to linguists because it forces most qualified scales to be used metaphorically with most concepts and, according to Osgood, the rule seems to be that metaphorically used scales rotate towards those affective dimensions on which they have their highest loadings. Osgood concedes that ^{the} Semantic Differential is not a general procedure for discovering semantic features, even though the EPA* are very significant features of the meaning system.

IV (3) CONCEPTS AND SCALES

Osgood (1957) attempts to explain the term "concept" within the framework of learning theory.

"The meaning of a sign was identified as representational mediation process - representational by virtue of comprising some portion of the total behaviour elicited by the significate, and mediating because this process, as a kind of self stimulation, serves to elicit overt behaviours, both linguistic and non-linguistic, that are appropriate to the things signified. In semantic decoding, stimulus patterns (signs as stimuli) selectively elicit representational processes as reactions in semantic decoding, vocal, orthographic, gestural and other response patterns (signs as responses) are selectively elicited by representational processes as stimuli. Thus we have a two stage mediation mechanism."

A concept is seen as basically a system of learned responses the purpose of which is to organise and interpret the data provided by sense perceptions. Past experience is automatically applied to prevent contingencies through the use of concepts. Concepts are specific words or phrases. Concepts have extensional and intentional uses. The Extensional is the universal meaning of the concepts which is more or less the same for everybody and the Intentional use is liable to vary considerably from person to person, it derives from the private experience of each person who has the concept, insofar as this experience has been affected by the stimulus object.

Osgood and his co-workers carried out a number of experiments which were to be the basis of the Semantic Differential. In a typical experiment/

* denote Osgood's Evaluative, Potency and Activity Scales respectively

experiment, a large number of pairs of adjectival scales was randomly selected from a thesaurus and included such items as good-bad, large-small, beautiful-ugly, hard-soft and so on. The two ends of each scale were divided to give a seven point rating scale. The subjects were asked to rate a number of concepts such as Self, Ideal Self, Father, Mother and so forth, on the scales. The data thus collected was summed over both subjects and concept to produce an inter-correlation matrix of every scale with every other scale. Such matrices were factor analysed.

A series of such studies tended repeatedly (Osgood et al 1957: Osgood 1962: Osgood 1969) to yield three principal factors, the Evaluative factor defined by ^{the} scale good-bad accounting for about 35% of the total variance in the matrix. Other scales with high loadings on this factor were: wise-foolish, beautiful-ugly, kind-cruel and so forth. A second factor, labelled Potency accounted for about 15% of the total variance and was defined by the scale strong-weak. Scales carrying high loading on this factor were hard-soft, masculine-feminine and so on. A third factor which also emerged fairly regularly was labelled Activity, defined by the scale active-passive, with high loadings on scales like excitable-calm, fast-slow and so on. This factor accounted for about 7½% of the total variance. Other factors found varied from study to study and accounted for such small amounts of variance that they were not considered important.

IV (4) THE SEMANTIC DIFFERENTIAL TECHNIQUE

A typical Semantic Differential format might contain a number of bipolar adjectival scales with high loadings on the three factors: Evaluative (good-bad, beautiful-ugly), Potency (strong-weak), and Activity (active-passive). The format usually contains fifteen or more scales. In a Semantic Differential format the largest proportion of scales usually belongs to the Evaluative factor for this factor accounts for/

FIGURE 4.1

A TYPICAL SEMANTIC DIFFERENTIAL FORMAT

<u>FATHER.</u>								
1. Good	___	___	___	___	___	___	___	Bad
*2. Cruel	___	___	___	___	___	___	___	Kind
3. Strong	___	___	___	___	___	___	___	Weak
*4. Passive	___	___	___	___	___	___	___	Active
5. Useful	___	___	___	___	___	___	___	Worthless
*6. Slow	___	___	___	___	___	___	___	Fast
*7. Delicate	___	___	___	___	___	___	___	Rugged
8. Fair	___	___	___	___	___	___	___	Unfair
*9. Soft	___	___	___	___	___	___	___	Hard
10. Clean	___	___	___	___	___	___	___	Dirty

Evaluation Scales 1, 2, 5, 8, 10.

Potency Scales 3, 7, 9,

Activity Scales 4, 6.

* Scale Poles reversed.

An example of a Semantic Differential technique.

In rating the concept "Father" the respondent places a check mark on the appropriate step of each scale.

The scales and their positions are usually mixed to avoid response bias.

Usually a much larger number of scales is employed.

for the largest proportion of variance. The next factor in order of importance is the Potency factor, followed by the Activity factor. For instance, in a Semantic Differential format of fifteen scales, the number of factors representing Evaluative, Potency and Activity factors may be 8, 4, 3 respectively.

In order to prepare the format, the scales are placed in a random order and care is taken to avoid response bias. There are usually seven steps between the two poles in each scale, thus representing a seven point measure on which a concept is to be rated. The selection of concepts is made to fit the problem under investigation. The subject can be asked to rate himself, a member of his family, friends, employers, teachers, public figures, or different occupations, emotions, active ideas, clinical diagnoses, therapy, vocational choices, and so on. The concept evaluated is printed on top of the page, above the scales. Separate concepts are rated on separate pages, using the same scales (See Fig. 4.1). A Semantic Differential format can be used to assess similarities and differences between ratings by different subjects of different concepts, or on different occasions. The Semantic Differential responses can be analysed in several different ways. For quantitative treatment the ratings on each scale can be assigned to a numerical value from 1 to 7 or -3 to +3. The overall similarity of two concepts can be measured in terms of their respective positions on all the scales. Alternatively Osgood et al(1957) recommended the generalised distance method (the D method). The Semantic distance between the two profiles can be measured by summing the scale scores for each of the three principal factors separately for each individual concept and comparing it with a similar score on the other concepts with the generalised distance formula.

$$D = \sqrt{(x - y)^2}$$

D is the distance between the two profiles x and y.

Example/

Example:

	<u>Profile x</u>	<u>Profile y</u>
Principal Factor		
<u>Total Score</u>		
Evaluation	6	2
Potency	6	3
Activity	5	2

$$D = \sqrt{(6 - 2)^2 + (6 - 3)^2 + (5 - 2)^2} = 5.8$$

Thus a profile (Semantic or multidimensional) distance between profile x and y is 5.8. They can also be calculated by summing over individual scales instead of factor scores. "D" is a useful measure if one is interested in the total Semantic similarity and not in any constituent component of the scores. However, if one is interested in different components of the profiles, D score is less valuable as information about the constituent components is lost, and comparison of constituent scores or factors is then a more pertinent approach.

IV (5) GENERALITY OF FACTOR-SYSTEM

Osgood (1957) maintained that the semantic meaning is essentially three dimensional. He made two important assertions: that the factor structure of the scales is stable across people and concepts. He claimed that some scales like good-bad and so on would always have a high loading on the Evaluation factor, strong-weak, hard-soft and so on, on the Potency factor and active-passive and so on, on Activity Factor. Osgood's assertions are considered separately.

IV (5) (i) Generality of Factors across people.

Osgood (1962) presented fairly convincing evidence that the factor structure of the scales is stable across various groups of people. Factors like I.Q., Sex, etc., do not seem to affect the factor-structure of the scales. Bopp (1955) found that schizophrenics and normals have little difference in the factor-structure of the Semantic Differential ratings. Wrigly & Neuhaus (1955) reported that, at least for the first two factors (E & P), the indices of factorial similarity were about as high between schizophrenic and normal groups as within them. Ware (1958) was unable to demonstrate any difference in diversity between the sexes and no consistent differences in qualitative factor-structures were found in either sex or IQ levels.

In a comparative study of six language-culture groups it was found that although E & P factors were found in different groups, the Activity factor was not found in a clear cut way. Osgood (1962) asserts that "the language code per se has no influence upon semantic factor-structure upon the space within which meaningful judgments can be made", and that the factor-structure of the scales is quite stable across people.

IV (5) (ii) Generality of Factors across Concepts

Unlike/

Unlike the generality of factors across people, Osgood early on (1957) realised that the factor-structure of the Semantic Differential scales was unstable across concepts.

"It is clear that there is a high degree of concept scales interaction; the meanings of scales and their variations to other concepts vary considerably with the concept being judged."

However, the instability of the factor-structure of scales across individual concepts has been largely ignored by Osgood himself and other research workers using the Semantic Differential technique. Osgood (1962) admits:

"If the scale relation were reasonably constant over concepts, then we should expect only minor variations within such rows of correlations (between any two scales) - but this proved not to be the case. Corresponding r 's were found to vary as much as from + .60 to - .60 in the same row."

Osgood thought it was the nature of concepts being judged that exercises a denotative restriction on scale-meanings. Discussing the "whys" of concept-scale interaction he asserts that a meaning is both denotative and connotative, and that:

"both of these biological systems - the affective energising system and the sensory-motor discrimination system - are integrated in ordinary behaviour; as we know and I think integration of the same systems in language behaviour is one of the reasons for concept scale interaction." (p.26).

Another reason put forward by Osgood is the context in which a concept is being judged, therefore, in Semantic Differential we find denotative contamination

"Particular concepts exert a selective limitation upon scale meanings, drawing forth a denotative usage of some and connotative usage of other"

He goes on to say:

"... each concept, concept class, will tend to produce rotation of scales towards its own characteristic attribute in the semantic space. Thus, if Potency is a dominant attribute to the concept class "Athletes", then good-bad should rotate towards increased correlation with strong-weak and decreased correlation with kind-cruel, whereas active/

"active-passive should shift towards strong-weak and away from excitable-calm - all such rotations tending to produce a coalescent 'Dynamism Factor'." (p.27).

Osgood, however, does not suggest any methods to overcome the problem of concept-scale interaction. Perhaps this is the reason why most of the studies using the Semantic Differential technique have ignored this aspect. Marks (1965) has commented on this aspect of Semantic Differential technique and in one of his studies he classed his concepts into two groups: Personal concepts and Emotional concepts. He then factor-analysed the scales separately for each class of concept, for each group of subjects. Although he found the factor-structure to be different for different groups, he found that some of his scales like: tasty-distasteful, clean-dirty, had lost much of their Evaluative loadings for Emotional concepts in Obsessives and Controls (p.48). However, in the final analysis, he ignored such differences and [that] the total factor scores were obtained by summing [up] the responses on the scales initially assumed to be related to the Evaluation factor.

Presley (1969) was the first to illustrate, meaningfully, that the correlations between scales vary from concept to concept. In his experiment, ten agoraphobic married women were given thirteen concepts to be rated on eleven bi-polar seven point scales. Nine scales were rotated to represent the three commonly elicited factors: Evaluation, Potency and Activity. In the second analysis, Pearson's product-moment correlation of each scale with every other scale was obtained for each concept separately and across all concepts taken together. The result showed that:

a) the correlation between two scales varied greatly in a row (e.g. $+0.079$ to $+0.922$).

b)

- b) the correlation over all concepts presents a false picture of the actual factor-structure of individual concepts and furthermore;
- c) the assumed relationship among the Evaluative scales e.g. good-bad, fair-unfair varied from .005 to .94 in the same row and was found to be significant only in two of the seven concepts. Therefore, the overall r of .492 although significant, is based on false assumptions.

The above study has shown that the usual summation procedure based on one factor-analysis over all concepts has little if any validity. The procedure employed by Marks (1965) in which factor-analyses were done on groups of concepts is relatively more satisfactory, but not more valid. The method which, theoretically, has any validity is the one in which the concept-scale interaction is fully taken into account. Ideally each concept should be factor-analysed individually and appropriate weight should be given to each scale according to its contribution to the components

In their study, Kubiniéc & Farr (1971) did not find a concept-scale interaction in the Evaluative scales. For each of the four concepts, all the scales presumed to be Evaluative on the basis of previous factor-analysis work did, in fact, cluster together. However, there was evidence that while the Evaluative scales within each of the four concepts clustered together, a separate component appeared for the scales for each of the four concepts. Although Evaluative scales represented the Evaluative measuring dimension across all concepts, subjects' responses to these scales from concept to concept were not consistent. The facts that low correlation between responses to the same scale for different concepts and that the Evaluative scales produce a different component on each of the four concepts, indicate that there is a concept-component interaction. They conclude that, when each concept/

concept-scale combination is treated as a variable, a concept-component interaction emerges. Concept-component interaction is defined as a tendency for scales representing the same meaning dimension to cluster together, within each of the several concepts, but to look on independent components across concepts.

Brynnner & Romney (1972) pointed out that if a separate factor-analysis is required for each concept to ascertain the scales that compose a factor and that such an approach would have different factor-structure for different concepts this procedure would rule out comparisons between concepts in terms of factors. They suggested that both across concepts and within concepts, factor analysis should be carried out and "by inspecting the factor loadings it should be possible to decide empirically which concepts the factors are valid for". In their own study they took the factor score estimation weights from the across-concept factor-analysis but restricted the scoring to just those concepts to which the facts applied. Their procedure worked with reasonable degree to their satisfaction. However, there is no guarantee that in other studies one is likely to find even one common factor across concepts that is composed of same scales with similar loadings.

Ideally, we should use as many scales as possible over as few concepts as absolutely essential. The choice of scales should be made according to the semantics of the concepts and the colloquial vocabulary of the subjects in the study. It may be useful to have open ended interviews with a sample of the subjects before a choice of scales (and of concepts) is made.

From the above appraisal of the underlying assumption of the Semantic Differential, it would seem imperative that before any meaningful inferences could be drawn from a study using this technique, the factorial/

factorial structure of the scales used should be established, both for the subject and for the concept.

IV (6) THE RELIABILITY OF THE SEMANTIC DIFFERENTIAL

Reliability refers to the consistency of scores obtained by the same individual when re-examined with the same test on different occasions, or with different sets of equivalent items or under other variable examining conditions. The concept of reliability underlies the computation^{at} of the error of measurement of a single score, whereby we can predict the range of fluctuations likely to occur in a single individual's scores as a result of irrelevant chance factors. Reliability of a measurement is concerned with the question: What proportion of the observed or measured differences in scores is attributable to true or actual differences? If this proportion is large, then the measurement reflects true differences, on the other hand if this proportion is small, a large part of what has been observed is error. This proportion of the amount of variation in true scores to the total variation is called reliability. In terms of tests, reliability is defined as the ratio of the true scores variance to the variance in the scores as observed. Reliability is an index of the amount of variable error in a test, varying from zero to one, having the former value when the measurement involves nothing but error and reaching the latter value only when there is no variable error at all in the measurement. Since reliability is the degree of agreement between two scores, it can be expressed in terms of correlation coefficient.

Reliability, as applied to measuring instruments like the Semantic Differential, can take on three meanings. These are:

- i) Stability of consistency of the measurement over time, called test-retest reliability.
- ii) Internal consistency, which is determined by an internal correlation called split-half reliability.
- iii)

- iii) Between-forms consistency, which is measured by comparing (correlating) forms of the instrument which there is reason to suppose are equivalent.

IV(6)(i) Stability over Time

One way of defining what is meant by variable error is in terms of random fluctuation in performance from one testing session to another. That is, error can be defined as anything which leads a person to get a different score on one testing than he obtained on another testing. Therefore, the reliability coefficient in this is simply the correlation between the scores obtained by the same person on two different occasions. The error variance corresponds to the random fluctuation of performance from one test session to another. Test-retest reliability shows the extent to which scores on a test can be generalised over different occasions; the higher the reliability the less susceptible the scores are to the random daily changes in the condition of the subject or the testing environment. The retest reliability is determined over a time interval, and since the retest correlation decreases progressively as the interval lengthens the test-retest reliability is bound by the time interval between two testings. The choice of the test-retest interval is important. Most researchers report that short-range, random fluctuations that occur during intervals ranging from a few hours to a few months are generally included under error variance of the test score. Thus, in checking this type of reliability, an effort is made to keep the interval short, and this period should be shorter for children than for adults, since, at an early age, progressive developmental changes are discernible over a period of a month, or even less. (Anastasi 1968 p.79).

The concept of reliability is generally restricted to short range/

range, random changes that characterise the test performance. If the interval is kept short, practice or memory can affect the performance on the subsequent testing. If the interval is too long, many traits of personality, interests and attitudes are believed to be continually in a state of flux. It may therefore be inappropriate to consider any and all changes in scores from one measurement time to another as being errors. Even with measures of achievement, ability and aptitude, there are problems. For, if a considerable time lapses between testings, because of some different experiences in the meantime, some subjects learn, others forget. Thus many of the changes in scores are not actually error, and to this extent, reliability is underestimated. On the other hand, if retesting is administered immediately, or after only a short period, the subjects, remembering their earlier responses, tend to answer the questions in the same way, the reliability is spuriously increased. The test-retest procedure then may either overestimate or underestimate the time reliability of the test and in many instances, it is difficult to determine which has occurred.

Evidence for test-retest reliability of the Semantic Differential has been produced by various research workers (Osgood 1957, Luria 1959, Bopp 1955, Norman 1959). The Evaluative scales have been found to be of highest test-retest reliability, followed by Potency and Activity scales.

With regard to the stability of the Semantic Differential, Osgood et al (1957) argue that the test-retest correlations are not appropriate as measures of stability, since subjects' responses have such a low variance. In a number of studies quoted, the stability coefficients were found to be over-estimates. Warr & Knapper (1968 p.75.)/

p.75) assert that though 'the maximum possible discrepancy between seven point scales (or even with over nine point scales) is not great, but it is worth noting that it is in the nature of product-moment correlation that a small range of values will tend to generate a low correlation'. The test-retest correlation thus found is considered a conservative estimate of Semantic Differential stability in relation to similar coefficients from instruments which generate a wider range of scores.

It is important to distinguish between two kinds of test-retest correlations which may be cited in discussion of the Semantic differential. These are based on (a) the mean response value of each scale and (b) individual response to each scale. The former is a global measure of the stability of the particular Semantic Differential instrument being studied. Stability coefficients of this kind are usually found to be extremely high. Jenkins, Russell & Suci (1958) report a correlation of .97 between mean responses on 20 scales and Osgood et al (1957 pp. 127 & 191) cite similar coefficients of .85 and .91. But this is not a very sensitive measure of stability and is always likely to yield higher values than the second kind of measure referred to above. The latter index is drawn directly from an individual's responses; the test-retest correlation is computed for each individual scale for each concept separately. Warr & Knapper (1968 p.76.) report 4 week test-retest ratings of four British politicians on twelve nine point scales. The test-retest correlation of mean scores on the scales and concepts exceeded .94. Taking each scale and each concept separately, the stability coefficients were high (mean r on 4 concepts .71, .60, .53, .71) and even an 8 week interval produced only a small decline in first test-retest correlation. In a comparative study of stability of seven point and nine point scales, no significant differences were found/

found between the two stability coefficients. DiVesta & Dick (1966) have quoted stability coefficients based on four week test-retest interval up to .77. Norman (1959) quotes test-retest values obtained from measurement separated by four weeks, the median of which is .66.

Other research workers have referred to a slightly different test retest reliability index, which is based on the second type of stability measure. The procedure involves averaging response to scales which represent a single factor, so that a factor score is generated. In this way, if a form includes three scales representing the Potency factor, the responses to these three can be combined and ²/stability coefficient for this single set of values can be correlated. The coefficients derived by this method from responses to seven point scales usually indicate that stability is satisfactory. Norman (1959) quotes values based upon responses separated by four weeks: coefficient for the three major factors on all at least .75. Slightly lower coefficients of this kind are reported by DiVesta & Dick (1966). It is typically found that values based on Factor scores are higher than those derived from individual scales. This is, of course, to be expected from a homogeneous sample of scales, and the magnitude of test-retest correlation, based on Factor scores is, in part, determined by the number of scales contributing to each Factor score.

In studies on test-retest reliability of individual scales the correlation varies widely between scales. Norman (1959) reports a range from .38 to .77, DiVesta & Dick (1966) find that values vary from .32 to .86, Mitchell (1965) observes a range of from .39 to .83, Warr & Knapper (1963) report a range of values from .31 to .74.

These variations in the test-retest stability of scales raise the possibility that certain scales are more reliable than others. In fact, there is ample evidence (e.g. DiVesta & Dick (1966), Warr & Knapper/

Knapper, 1968) to suggest that this test-retest reliability of scales varies with scales, concepts and subjects.

To sum up the stability of Semantic Differential responses over time, it can be seen that test-retest coefficients are usually acceptably high with both adults and children. It appears that increasing the permitted number of alternative responses by providing more scale points than the customary seven does not affect stability. Though it can be predicted to some extent which scales will be most reliable in a particular context there is no doubt that stability varies both with scales and with concepts. It is meaningless to ask about the test-retest reliability of the Semantic Differential; one ought to enquire about the stability of the set of scales employed in a specified investigation. Since the Semantic Differential is a class of measuring instrument rather than itself being an instrument, to ask about test-retest reliability is not a relevant question. The technique has to be evaluated by assessing the particular form developed through it, the context in which it is going to be used, with the types of subjects and concepts to be used. In short, every investigation has to establish its own reliability.

IV(6)(ii) Internal Consistency

Tests of internal consistency are concerned with the consistency of a subject's responses on a single occasion. Two scores are obtained for each individual by dividing the test into comparable halves. It is apparent that this split-half method provides a measure of consistency with regard to content sampling. The temporal stability of the scores does not enter into such reliability, because only one test session is involved. This type of reliability coefficient is sometimes called a coefficient of internal consistency. If a test is assumed to be measuring a single attribute we can assess internal consistency by correlating/

correlating the subjects' scores on the first half of the test with their scores on the second half (the split-half method) or by correlating the scores on the odd-numbered items with the scores on the even-numbered items (the odd-even method). The higher a correlation of this kind, the more equivalent are the two parts of the test and the more confident we are that the instrument is discriminating among subjects along a single dimension. Other things being equal, the longer the test, the more reliable the internal consistency will be. The Spearman-Brown formula is widely used in determining reliability by the split-half method.

Psychological tests are usually required to have a high internal consistency and Semantic Differential forms are expected to fulfil this requirement. However, since each Semantic Differential scale is supposed to measure separate dimensions the relevance of internal consistency to Semantic Differential is doubtful. But since the scales belong to either Evaluative, Potency or Activity factors, internal consistency of a set of scales is implicit, for the scales are selected to have a high loading on one of the three factors. The measuring of and inter-correlation between scales can vary between concepts; this implies that scales selected on the basis of previous results to represent one factor may, in fact, not be correlated to the anticipated degree. So, the internal consistency of a set of scales intended to measure a single factor is a matter for empirical observation. It can depend upon the scales, the subjects and the concepts involved in a particular investigation. Provided the selection of scales has been judicious, in that evidence from related concepts has been used, the internal consistency is expected to be high. Actual evidence for internal consistency is rather scarce. Warr & Knapper (1968) report factor consistency in two experiments, as follows:

Evaluative

Evaluative	.70 and .76
Potency	.75 and .56
Activity	.66 and .58

The consistency figures are not as high as would normally be required. It is not easy to determine what an adequate level of reliability should be. A reliability coefficient should be interpreted as acceptable or not, in terms of the procedure used, and homogeneity of the analysis group. It should be evaluated in the light of the purpose for which the test is used.

IV(6)(iii) Between-Form Reliability

In measuring this form of reliability, the subject can be tested with one form on the first occasion and with another comparable form on a second occasion. The correlation between scores obtained on the two forms represents the reliability coefficient of the test. If the two forms are administered at one sitting, we are, in fact, concerned with a special case of internal consistency measurement, as if we are correlating two halves of a test. If the two forms are completed at different times, the reliability coefficient thus obtained includes a measure of both temporal stability and consistency of response to different item samples. The crucial question in between-form reliability is how comparable and parallel the two forms are. Fundamentally, parallel forms of a test should be independently constructed tests designed to meet the same specifications. The test should contain the same number of items, the items should be expressed in the same form and should cover the same type of content. The range and level of difficulty of items should be equal. Instructions, time limit, examples, format and all other aspects of the test must be checked for comparability.

In/

In preparing alternate Semantic Differential forms, the comparability of factor loading of the scales on the two sets of concepts used in both forms is going to pose difficult problems due to the variation of factor loadings of scales, and concept-scale interaction. Warr & Knapper (1968) found that in between-form reliability of a set of scales, when forms differ, order and polarity of scales was high. The order of presentation of scales and polarity of scales did not produce any significant changes in the responses of the subjects.

To conclude, evidence of the reliability of the Semantic Differential was presented in terms of test-retest reliability, internal consistency and between-form reliability. An appraisal of the evidence presented suggests that the question of the reliability of the Semantic Differential is not a valid one. The Semantic Differential is not an instrument or a test, it is a scaling procedure or a technique for measurement. Its reliability does vary considerably due to a multitude of diverse factors, e.g. the subject used, the test situation, the purpose of the investigation, the concepts and scales used, to name but a few. Therefore, each investigation needs to establish its own reliability and, if necessary, improve it to a higher predetermined level (Guilford & Fruchter 1978).

IV (7) VALIDITY OF THE SEMANTIC DIFFERENTIAL

Since psychological testing is an indirect method of assessing behaviour, it is important to determine how well a test does measure what it claims to measure. Fundamentally, all procedures of determining test validity are concerned with the relationship with performance on the test and other independently observable facts about the behaviour characteristics under consideration. (Anastasi 1968. p. 99.). Following is a description of various types of validity and each type will be discussed with/

with special reference to the Semantic Differential.

IV(7)(i) Face Validity

Face validity is not really validity in the technical sense, for it refers, not to what the test actually measures, but to what it appears, superficially, to measure. Face validity pertains to whether the test 'looks valid', or appears valid to the subjects, or the testers, or the observers. Face validity can often be improved by merely reformulating test items in terms that appear relevant and plausible in the particular setting in which they will be used. Face validity is very relevant at the time of test construction, after that it is of little importance. Though it cannot be measured quantitatively, the Semantic Differential is considered to have a high degree of face validity. (Warr & Knapper 1968 p. 89. and Osgood et al 1957) have given examples to support face validity of the technique where there is agreement between commonsense distinctions and those provided by the instrument.

IV(7)(ii) Intrinsic Validity

This again is not really a form of validity. This is usually defined in terms of the square root of the test-retest reliability of an instrument.

IV(7)(iii) Predictive Validity

Also known as criterion-related validity, it indicates the effectiveness of a test in predicting a future outcome and is usually measured in terms of the correlation between test scores and external criterion measures. The criterion can be a direct and independent measure of that which the test is designed to predict.

Evaluating the predictive validity of the Semantic Differential is beset with a number of problems. The Semantic Differential ratings/

ratings to various concepts are not expected to be predictive of future behaviour, for it is not possible to establish a situation in which the subjects and stimulus person can interact in a way that such a prediction can be testable. The heterogeneity of the scales makes the prediction difficult. Warr & Knapper (1968) suggest ways to overcome this difficulty: Responses to all scales can be summated or take only specified dimensions, or select a number of apparently relevant scales. On the whole, studies of individual scales seem preferable, but decisions about this will depend upon the aims of a particular study.

Osgood & Luria (1954), Osgood et al (1957) were able to make successful clinical predictions in the case of triple personality.

Marks (1965, 1966) has drawn attention to some predictions which may be made about the behaviour of several categories of psychiatric patients from their responses to Semantic Differential scales.

Osgood et al (1957 pp. 142-143) report a study of voting behaviour and Semantic Differential ratings. They compared the responses of undecided voters with those with confirmed support of the two candidates of the 1952 USA Presidential Election. Responses to a number of political concepts were compared in an attempt to predict the eventual voting behaviour of eighteen 'undecided' respondents from their similarity of judgments to those of subjects whose minds were made up. In seventeen cases the predictions were correct, at least when only Evaluative and Potency scales were represented. The Activity scale reduced the success with which predictions could be made. These results suggest that the Semantic Differential can have an acceptable predictive validity. It is important/

important to note that only post hoc predictions of the study can be validly made. In a similar analysis of data (Warr & Knapper 1968 p.92.), post hoc predictions of different voting behaviour of different groups were high. Predicting 'which individual would vote for which party' was carried out by taking the total response value from each subject, for each leader of the three political parties and using this as the basis for their forecast. They summed [up] responses to the twelve scales used. It was predicted that the individual would vote for the party whose leader had the highest total score. The voting behaviour of 64 undecided voters was judged this way and their predictions were found to be correct on 40 occasions ($p < .05$).

IV(7)(iv) Content Validity

A test is said to have content validity when it covers a representative sample of the behaviour or characteristics which are being studied. The content area to be tested must be systematically analysed to make certain that all major aspects are adequately covered by the test items and in correct proportions.

For achievement tests, the tests should cover a representative sample of curricular content, and the test performance should be reasonably free from the influence of irrelevant variables. For aptitude and personality tests, content validity is usually inappropriate and may, in fact, be misleading. The eventual validation of aptitude or personality tests requires empirical verification. The content of aptitude and personality tests can do little more than reveal the hypothesis that led the test constructor to choose a certain type of content for measuring a specific trait. Such hypotheses need to be empirically confirmed to establish a validity of the test.

The/

The Semantic Differential attempts to measure the meaning of a concept and all important aspects of measuring should be adequately sampled in any Semantic Differential form. The underlying assumption that there are three major factors, Evaluative, Potency and Activity, accounting for almost of the variance, suggests that scales with high loadings on each of the factors should be included in any form. This procedure ought to ensure high content validity. However, this method is open to serious objections. An adequate sampling of all dimensions and meanings of a concept is not possible, and therefore the content validity of a Semantic Differential form cannot be clearly established. The assumptions regarding the underlying factors in the measurement of meaning does not seem to hold. Moreover, the wide variation in loadings of scales across concepts makes it difficult to assess the content validity of the Semantic Differential. The assumption of the three factors and selecting scales to represent these three factors, then analysing and finding the three factors is a somewhat circular argument put forward by Osgood et al (1957) and almost blindly accepted by many other subsequent users of the Semantic Differential.

Warr & Knapper (1968) express a doubt about whether 'we can treat the factor as a single dimension, if some scales which typify it yield significant differences between two reports, whereas, other scales for the same factor do not'. This sampling problem is central to any discussion of validity, for it is not possible to be absolutely sure that a Semantic Differential form includes all important aspects of a concept. This is a drawback with the Semantic Differential and, at best, we can just 'guess' what the relevant scales to be used are, in a particular study.

IV(7)(v) Concurrent Validity

Concurrent/

Concurrent validity refers to the association between two measures taken approximately at the same time. Osgood et al (1957) suggested that the Evaluative scales of the Semantic Differential may be used as a measure of attitudes.. This means that we can test the concurrent validity of a Semantic Differential form comprising such scales by comparing responses on these scales with responses on other forms of attitude scales. High levels of concurrent validity have, in fact, been reported in comparisons with Thurstone & Guttman scales and with Bogardus Social Distance Scale (Osgood et al, 1957 pp 193-194, 199 and Proenzal & Strickland 1965). Attitude measurement in terms of latitudes of acceptance and rejection has been studied intensively (Sherif & Hoveland 1961).

The concurrent validity of Semantic Differential scales as indications of attitudes has been examined by Diab (1965). He found close parallels between scale responses and subject latitudes of acceptance of attitude-relevant statements. There is no doubt that responses to Evaluative scales provide a valid measure of at least part of attitude. However, it seems that Evaluative responses alone are not satisfactory measures of attitudes in their entirety (e.g. Weksel & Hennes 1965), and we need to define 'attitude' more broadly (e.g. Krech, Crutchfield & Ballachy 1962 p. 139)

The Semantic Differential was originally an index of meaning. Since other definitions are usually different from that in terms of the Semantic Differential, it is rather difficult to establish concurrent validity. Kelly & Levy (1961) asked their subjects to judge which of two Semantic Differential profiles represented a particular concept; they related the discriminability of concepts to/

to the difference between Semantic Differential profiles. Kelly & Levy observed a clear positive relationship between two separate measures. Marks (1965) related patients' judgments of Myself, My Father and My Mother to a psychiatrist's assessment of the way in which these people would be judged by the patients. He found that the correlation between the two measures typically exceeded .70.

Hallworth (1965) has studied school teachers' perceptions of their pupils. He reports a close relationship between clusters of Semantic Differential scale responses and sets of personality ratings. For example, teachers' ratings of pupils' emotional stability, trustworthiness and persistence are closely related to their Semantic Differential judgments of the children on scales representing the Evaluative factor. In view of the similarity between Semantic Differential and Repertory Grid technique, we should expect that the concurrent validity of the former in terms of the latter should be high. Jaspars (1963) obtained information from 30 subjects and observed that the two measures were positively related. He reports correlations which range from .26 to .78. However, due to the different theories underlying the two approaches, the analysis carried out by the Semantic Differential technique and the analysis carried out by the Grid technique were found not to correlate (Fransella 1965). Since the traditional three factors are not always located, the comparison of the two techniques can not be made. The profile comparison of 'elicited' and 'supplied' constructs were found to yield very similar results (Fransella & Adams 1965; Jaspars 1963; Mitsos 1961). Warr & Knapper (1968) report the concurrent validity of the Semantic Differential values and the Adjective check list ($\rho = .82$) and Semantic Differential and Multi-dimensional Scaling ($\rho = .92$).

IV(7)(vi) Construct Validity

The construct validity of a test is the extent to which the test may be said to measure a theoretical construct or trait. The assessment of construct validity can only be made after the instrument has been used in research over quite a long period. Cronbach & Meehl (1955) list five types of evidence which might be considered appropriate for establishing construct validity. They suggest that, on a test which has construct validity, firstly, different groups should score differently and a finding of no difference at all would certainly lead to real doubts about the validity of the test in question. Secondly, when some people are studied longitudinally, some changes in performance should occur. The evidence is more convincing if the introduction of specific variables results in predictable changes. Thirdly, the two measures of the same trait ought to correlate highly. Campbell & Fiske (1959) have suggested a way of systematically studying correlational evidence for inferring construct validity. Since some of the observed variance is attributable to the methods of measurement and not to the trait in question, to determine whether a test measures some specific trait or not can be difficult. According to Cronbach & Meehl (1955) it is necessary to establish what the test measures and what it does not. Campbell & Fiske (1959) suggest a validation process which requires the computation of intercorrelations among tests which represent at least two traits, each measured by at least two different methods. Fourthly, the internal consistency of the test should also be established. A careful, logical analysis of the trait and its relationships to other variables and to special characteristics of the measuring device should lead to specific predictions of what to expect. Finally, Cronbach & Meehl (1955) suggest a study of the test-taking/

test-taking process, like the abilities required to complete the test, and the influence of response sets should be studied.

Osgood (1957) presents evidence for construct validity of the instrument and reports marked differences between judgments by adolescents, boys and girls, and McClay & Ware (1961) recorded the variations they expected between groups from three different Indian cultures. Marks (1965) found that patients' Semantic Differential judgment of their fathers were in accordance with his hypothesis about their upbringing. The instrument appears promising as a measure of situation anxiety (Alexander & Husek 1962) and of aesthetic appreciation (Gray & Wheeler 1961).

To conclude, the validity of the Semantic Differential has been demonstrated in a number of studies presented above. However, just as with reliability, a search for the validity of the Semantic Differential would be fruitless. As English & English (1958) state "there is no such thing as general validity we determine the degree of validity, and the validity index has no meaning apart from the particular operations by which it is determined". Again, as in the case of reliability, the validity of the Semantic Differential depends upon the context in which it is used, the subject it is given to and concept and scale used in the format. Therefore, each study using the Semantic Differential needs to establish its own validity.

IV (8) A REVIEW OF PERTINENT STUDIES USING THE SEMANTIC DIFFERENTIAL

The Semantic Differential technique has been used in various fields of Sociology, Psychology, Social Psychology and Psychiatry etc. with varying degree of success. Following studies will show the variety of fields in which the Semantic Differential has been used as the principal technique.

Osgood/

Osgood & Luria (1954) in "A Blind Analysis of a Case of Multiple Personality" (of the 'Three Faces of Eve') shows that Eve White, Eve Black and Jane scored differently on the Semantic Differential while rating the same concepts. Although the interpretation of the three ratings is mainly speculative, it illustrated the versatility of this technique.

Bopp (1955) studied the factor-structure of Schizophrenics' ratings on the Semantic Differential and her conclusions vitiated the hypothesis that the semantic structure of the schizophrenics would differ from that of the "Normals". However, she found that the schizophrenics were less discriminating in their scale checking styles than the tubercular orthopaedic patients. Arthur (1965) suggested that in clinical use, the significance of difference between two concepts could be measured by the probability of obtaining a given difference for a given dimension.

IV(8)(i) Self Concept

Jorgensen & Howell (1969) found that the Self and Ideal-Self congruence decreased between the ages of 8-12 in boys and stabilised between the ages of 13-18 for both boys and girls. Hunt (1967) in a study to find relationship between the self-concept and choice of vocation, tested 258 professional men on 25 Semantic Differential scales, testing 16 self, vocational and other concepts. The interconcept relationship was measured with a D score. A multiple discriminant analysis produced 3 significant functions (each $p < .001$) between the criterion groups. In a cross validation group of male undergraduates Semantic Differential profiles correctly classified 70 of the 139 S's according to the Kuder's scores and 82 out of 125 of these according to first choice of vocation.

Hartlage & Hare (1968) found that the self-concept of the psychiatric patients declined within a month of hospitalisation. Frisbie et al (1967) studied the Self and Ideal-Self concepts of paedophiles. The group consisted of 215 institutionalised and 142 paedophiles/

paedophiles living in the community. Both were given 25 Semantic Differential scales, 15 of which had been chosen from Osgood's et al (1957) list, 5 of the scales were adapted to be more compatible with the intellectual and educational backgrounds of the S's (e.g. Smart - Dumb) and 5 scales were new. The order of presentation of the scales was such that the 1 - 6 scales were about the physical characteristics (Beautiful - Ugly) etc. The next 12 scales were about personality traits and the last 7 invited perception of character image (Moral, Ethical, etc.). The method of rating used was graphic and the length of a line was measured in millimetres. The results showed that words that were clearly Evaluative in nature did not lead to any discrepancies in the ratings of the 2 concepts Self and Ideal-Self. Words that were descriptive, but non-Evaluative gave rise to large differences between ratings of the 2 concepts. In general, no significant differences were found between the 2 groups of paedophiles.

The above study, although fairly comprehensive, had some methodological shortcomings. Of the 25 scales used, 10 were of unknown factor loadings. Instead of assuming the scales to be Evaluative or non-Evaluative, the factor structure of all scales should have been investigated. Moreover, the study did not investigate the relationship between different concepts. Finally, the rank order correlation method employed was unsatisfactory for the large number of scales used.

IV(8)(ii) Interpersonal Relationships

Katz (1965) used the Semantic Differential to study matrimonial harmony. He hypothesised that "unhappily married couples are more discrepant in their semantic structure than happily married couples". He selected 2 comparable groups of 10 couples each. One group had concepts/

concepts related to marriage and the other group had not. He found that troubled couples were more discrepant than untroubled couples in:

- a) the overall Semantic Structure of the Factors,
- b) in meaning they attributed to marital concepts, and
- c) the troubled couples agreed more on concepts unrelated to marriage than on marital concepts.

The Semantic Differential technique has also been used in studying relationships between parents and children in schizophrenic families. Nathason (1967) compared the Semantic Differential ratings of schizophrenics and non schizophrenics on words and photographs representing parental punishment, rejection, love and affection. He found that poor premorbid schizophrenics rated the rejecting parents significantly more potent and active than the non schizophrenic group. He did not find any differences between good and poor premorbid schizophrenics.

Laxer (1967) studying the relationship between schizophrenia and parental rejection found that schizophrenics showed lower ratings of Parental concepts and Childhood on the E P A factors. Also, schizophrenics showed greater semantic distance between Love and Mother and Father than non schizophrenic patients. However, it was found that there was smaller semantic distance between Hatred and Childhood. Baraff & Cunningham (1965) found that asthmatic children were more negative on their ratings of parental concepts than the normals.

IV(8)(iii) Delinquency

Dieskova (1969) found that delinquent girls have more negative attitudes than non delinquents towards persons in their environment. Soma (1962) found that delinquents' cognition of their own inter-personal relationships was negative, yet they valued positive inter-personal/

personal relationships. Masters & Tong (1968) compared the ratings of recidivists, non recidivists and the controls on three groups of concepts: central concepts (Home, Father, Mother, Me, Body), distress concepts (Need, Love, Hate, Fear, Sex, Punishment, Running) and peripheral concepts (Work, School, Man, Woman, Boy, Girl, Other People, Baby). The ratings of the three groups of subjects were summed and t test was carried out for the significance of difference between the scores on the Evaluative factor only and the Potency and Activity factor produced no difference.

The results were as follows:

	<u>CONTROLS</u>	<u>NON RECIDIVISTS</u>	<u>RECIDIVISTS</u>
Central Concepts	150.75	149.8	119.25
Distress Concepts	166.05	159.65	148.9
Peripheral Concepts	207.35	213.85	194.85

They found that in their ratings of the central concepts, Recidivists differed significantly ($p < .005$) from the Controls and the non Recidivists. On distress concepts there was a significant difference ($p < .005$) between the Controls and the Recidivists. Peripheral concepts showed significant differences between Recidivists and non Recidivists ($p < .005$) and Recidivists and Control groups ($p < .025$).

The above study, although it gives interesting results, is methodologically inadequate. The Semantic Differential scales were selected from Osgood's original list and used without checking the reliability of the scales. Also, the factor structure of the scales was not worked out and it is not certain whether the scale assumed to belong to Evaluative factor were, in fact, representing the same factor. In addition to ignoring the scale loadings, no test of homogeneity of variance was applied.

In the present day literature on the Semantic Differential, studies using delinquent subjects are few and far between. Studies have/

have shown that the Semantic Differential could prove to be a useful tool in research on delinquency. Bhagat & Fraser (1970)^a found that the Semantic Differential is just as possible with the retarded offender as it is with the average IQ offender. However, there is a marked lack of studies on delinquency using the Semantic Differential which are both comprehensive and methodologically sound.

IV(8)(iv) Studies on Therapeutic Change

Luria (1959) showed that subjects who received psychotherapy appeared to have significantly improved their self concepts on the Semantic Differential ratings. However, their judgment of parental concepts remained unchanged. She found that therapy and non therapy groups could be differentiated on the basis of their ratings of some concepts like Self and Parents. The therapy tended to rate these concepts less favourably.

Barrett & Otis (1967) showed that personal concepts like Myself and My Problems etc. changed favourably as a result of counselling. Dingman et al (1969) studied progress in therapy using the Semantic Differential. They found that the subjects not only showed apparent changes in their ratings, but also showed changes in their factor structure of the scales. Their findings raise a number of questions with regard to test reliability of the Semantic Differential technique.

Neuringer (1967) hypothesised that suicidal persons dichotomise their organisation of meaning more than emotionally disturbed and normal groups. Using 18 concepts he had two measures of dichotomised thinking:

- a) Extremeness of rating scores
- b) Differences between selected pairs of concepts scores.

The results showed that suicidal and psychosomatic groups scored significantly higher on E factor scales than the normals. The suicidal/

suicidal group scored higher on P and A factors than the other group.

Morin (1967) tested depressive patients on the Semantic Differential before and after treatment. He found that there was a significant and favourable displacement of concepts like Self and Future and a more global organisation of the conceptual field.

A brief review of studies using the Semantic Differential has been presented. This review illustrates the application of this technique in four major and relevant areas. A number of other investigations in sociology, social psychology, market research, attitudinal and opinion studies and so forth have demonstrated the versatility of this approach. The Semantic Differential technique can be adapted to provide a procedure to investigate a wide variety of issues.

IV(9) RESPONSE STYLES

The Semantic Differential techniques, in common with any other questionnaire methods which attempt to assess attitudes and opinions, may be subject to response styles, response bias or response set. They are simply consistent patterns of response behaviour exhibited in the test situation which reflect personality characteristics of the respondent other than responses to the questions. Response styles have been observed in dichotomous methods of scoring (Kelly 1955) where the subject refers to attribute elements to one rather than the other pole. In situations where a grading method is used, for example in the Semantic Differential (or graded forms of Grid method) the subject may tend to rate the concept in terms of extreme poles of the individual scales (extreme response style). Other subjects may predominantly use the mid point or neutral point for the scales (defensive style).

Various studies have pointed out an association between different response styles and personality variables. The following is a brief review of such studies, with particular reference to the Semantic Differential technique.

IV(9)(i) Extreme Response Style (ERS)/

IV(9)(i) Extreme Response Style(ERS)

Hesterley (1963) found that very young (6 to 17 years old) and elderly (60 to 83 years old) subjects were similar to each other in that both tended to make extreme responses more frequently than a 20 to 29 years age group.

It was found that the ERS scores of the elderly approximated to those of 9 to 10 years old. A number of other studies have shown that the ERS decreases throughout childhood and adolescence (Light et al 1965: Zax et al 1964: Soueif 1958).

Kerrick (1956) found an inverse relationship between IQ and a tendency to give extreme responses in college students. Subjects with low IQs tended to have more polarised judgments and the IQ and anxiety were shown to interact and anxiety tended to make higher IQ subjects less discriminating in their judgments. They used polar and mid points more frequently. Anxiety on low IQ subjects, however, had the converse effect. Stricker & Zax (1966) studying 240 subjects of 4th, 8th and 12th grades felt that discriminability increased as a function of intelligence. On the other hand, Zuckerman & Norton (1961) using student nurses as subjects, reported a near zero correlation between ERS and intelligence.

The relationship between pathological features of personality and ERS is perhaps the most important in this area. Many studies have found that generalised anxiety produced more extreme responses than less anxious subjects. Costello (1968) found ERS to be related to anxiety scores of the subjects. Bopp (1955) found schizophrenics to be far less discriminating in their use of the Semantic Differential scales than the controls. Neuringer (1963) did not find his normal and neuro-psychiatric subjects to be different in their response styles when matched on intelligence. However, neuro-psychiatric patients/

patients tended to use extreme positions more than the normals and he concluded that the diversity of intensity of the Semantic differential ratings seemed to be related more to the neuro-psychiatric involvement than to the intellectual level.

O'Donovan (1965) in a review of many pathological correlates of ERS mentions the following - neurosis, primitive id impulses, mental patient status, deviance, maladjustment, anxiety, intolerance of ambiguity, inflexibility, desire for certainty, rigidity and dogmatism. The level of emotional adjustment has also been found to be related to the ERS. Zax et al (1964) found that "maladjusted subjects" used ERS significantly more than "well adjusted groups".

Norman (1969) explored the relationship between the ERS and emotional adjustment. 115 subjects were given the Welsh A scale of the MMPI to measure anxiety. They were also asked to rate 9 stimuli on 21 Semantic Differential scales. The stimuli reflected three levels of ambiguity, represented by verbal concepts, T.A.T. cards and the Rorschach cards. Results showed that high anxiety was related to the ERS. Well adjusted subjects tended to make more use of the intermediate category. Anxious subjects were also found to make more extreme responses when the stimuli were most ambiguous.

An interesting study by Iwawaki & Zax (1969) linked ERS in personality dimension and pathology as measured by the Maudsley Personality Inventory (MPI) on the sample of male college students. They found that subjects scoring high on the neurotic dimension made significantly more extreme responses than low scorers. The low neuroticism scoring extraverts had significantly fewer extreme ratings than high neuroticism scoring extraverts. The differences between the introverts and the extraverts, as a whole, were not/

not quite significant, but were in the direction of extraverts tending to give more ERS responses than introverts.

Chetwynd (1977) using Graded Grids in a series of experiments consistently found a significant relationship between neuroticism and Extreme Response Styles. It was thus implied that the subject exhibiting a high extreme response score would tend to be characterised by a neurotic personality, whereas low ERS scores tend not to exhibit neurotic traits.

Walkey & Boshier (1969) found that delinquents tend to use more ERS than non delinquents. They had 142 boys with a mean age of 12.8 years. The subjects were 17 "psychopaths", 25 "delinquents" and 100 "normals". The classification of the subjects was made according to McCord & McCord criteria. Eight concepts had to be judged on twelve five point scales and mean frequencies were calculated on Extreme (1 and 5) Intermediate (2 and 4) and Neutral response (3) styles. The significance of difference between the groups was calculated as 1-tailed t-test. It was found that, in their use of the three response categories, "Normals" differed significantly from "Delinquents" and "Psychopaths".

A comparison of response styles of the three groups of subjects produced the following results.

<u>Groups Compared</u>	<u>Sig. level</u>
Delinquents Vs. Normals	<.01
Psychopaths/Delinquents Vs. Normals	<.001
Psychopaths Vs. Normals	<.05

They also found that there were differences in the ERS of the groups on various concepts.

Parsonson/

Parsonson (1969) examining the findings of previous studies that psychiatric patients as compared with "normals" exhibit a high frequency of polar responses matched three groups of "normals", "neurotics" and "psychotics". They were given seven concepts to be rated on nine scales and their checking styles compared. He found that psychiatric patients checked the extreme ends of the scales more often than "normals". However, "psychotics" were not found to show the ERS significantly more than the "neurotics".

Marks (1965) found that on Emotional concepts, both psychopaths and obsessives scored more extremely than controls ($p < .001$) using the positions on the polar ends and the neutral mid-point. Psychopaths were even more extreme than obsessives. On Personal concepts, psychopaths scored more extremely than controls and obsessives ($p < .001$).

IV(9)(11) The Neutral Response

The investigation of the tendency of some subjects to check the mid point on the Semantic Differential scales is comparatively recent. Arthur (1962) studying phobic patients found them to use the ERS frequently. He also found that phobic patients used the neutral positions more than the controls. Arthur (1966), however, did not find his neurotic and psychotic subjects to be different in their usage of the mid point of the scales. Norman (1969) found that "Repression" (high "A" and low "R" on the MMPI scales) was related to the frequency with which the mid point was checked. Iwawaki & Zax (1969) found no significant difference in neurotic ratings of introverts and extraverts. Zax (et al 1964) did not find well adjusted and mal-adjusted subjects to be different in their ratings of the neutral category./

category.

Weksel & Hennes (1965) found a low correlation between the ERS of college students and an independent measure of attitude intensity. They concluded that polarity scores should not be equated with the intensity scores of the attitude. McCroskey (et al 1967) asserted that in the Semantic Differential scales, the neutral point in attitudinal intensity was not represented by the mid point on individual bi-polar scales. Worthy (1969) put forward the idea that the mid point is psychologically similar to an extreme response, since it represents a concrete unambiguous position. He tested 74 subjects on 18 concepts using 6 Semantic Differential scales from the Potency factor only. For each subject the proportion of responses in the three middle categories and outer four categories in the two end scales were computed and correlated. The correlation between the ERS and the Neutral responses was found to be significant at 0.01 level. Worthy concluded that those who tend to make extreme responses also make mid point responses, and, as a measure of the ERS, the Neutral responses should also be treated as Extreme responses. He suggested that a measure of the ERS should be obtained by adding together the responses in the end categories and the responses in the middle category. In his experiment the data yielded a split-half reliability of .91.

IV (9)(iii) Reliability of the ERS

The Semantic Differential literature on the reliability of the ERS is scanty. Arthur (1966) presents the only case in which parallel forms of ERS measures were developed. He used two sets of seven concepts each to be rated on ten bi-polar scales. The parallel form reliability coefficient of ERS scores was .88. When administered separately by a four week interval, the correlation was .72. He concluded/

concluded that the Semantic Differential response bias has reasonable interval consistency as a measure over time (four weeks) and by equivalent forms of the same scales and different concepts.

IV.(9)(iv)Discussion

From the present literature the only general conclusion that can be reached is that the ERS is closely associated with general personality pathology (variously defined as anxiety, neuroticism, maladjustment and psychiatric disturbance). ERS tends to increase with increasing degrees of pathology. The relationship of ERS with factors like intelligence, sex, personality type is not clear for the evidence is inconclusive, and in some cases, contradictory. It may be an over-simplification to expect the ERS to have a direct relation with ^{any} individual personality factor. In most studies, the interaction of these factors has been ignored. In the Semantic Differential, for example, the type of the concept and scales used may interact with the type of person, to produce an Extreme response style. Walkey & Boshier (1969) pointed out differences in response styles of delinquents, psychopaths and normals across concepts, but this has not been elaborated. Marks (1965) attempted to measure the ERS of his three groups of subjects on three types of concepts. He found that the psychopaths, obsessives and controls showed different response styles on Emotional, Personal and Social concepts. It seems that while studying the response styles of various subjects, it is important to bear in mind which concepts tend to produce what type of response styles by what subjects. The possibility of subjects/concept, concept/scale interacting with the response styles is worth looking into.

IV (10) AN EVALUATION OF OSGOOD'S SEMANTIC DIFFERENTIAL

In this chapter the theory, practice and application of Osgood's Semantic Differential has been presented. Osgood attempted to explain psychological/

psychological meaning in terms of learning theory by means of the representational mediation process. Mistakenly, he believed that the factor analysed meaning has three dimensions, and erroneously, he generalised his scheme in toto to a wide variety of situations, subjects and concepts. His neat and simple theory appealed to a number of researchers who almost blindly accepted it and misguidedly used it in their investigations. However, notwithstanding the test of time, Osgood's theory dwindled and shrivelled and has now become a part of history. However, the Semantic Differential technique, as a method of measurement, has survived. This scaling procedure has been applied to a wide variety of investigations and has been shown to be versatile and flexible. Moreover, one does not have to subscribe to Osgood's theory wholly or partly in order to use this technique.

The Semantic Differential technique is not a test and not a questionnaire and it can be adapted to the nature and type of investigation. It is an oblique and indirect approach, relatively less susceptible to faking and usable with subjects of different levels of intellectual capacity. It has been shown to be a reliable and valid procedure. However, the reliability and validity of a Semantic Differential, in fact, depends on the expertise and the ingenuity of the investigator.

CHAPTER V

THE SAMPLE.

Offenders allocated to H.M. Borstal at Feltham during 1968 were included in this study, with the exception of those who had a known history of epilepsy, organic brain damage, severe physical disablement, severe subnormality, psychotics and those who were too disturbed to be testable. Relevant information on each individual thus selected was obtained from his records and will be discussed later.

V (1) SELECTION OF THE BORSTAL

In the present study, the allocation centre was H.M. Prison Wormwood Scrubs, which at that time, received Borstal trainees from England and Wales, and the Borstal selected was Feltham, Middlesex. For the purpose of investigation, all trainees allocated to H.M. Borstal, Feltham over a period of twelve consecutive months were selected as the experimental group. The reasons for selecting Feltham were as follows:

- a) The Borstal is situated just outside S.W. London, and was easily accessible.
- b) Feltham was regarded as a "Psychiatric Borstal" for the trainees sent to them were generally categorised as "disturbed". Most of them, having "inadequate personalities" were considered to be in need of some psychiatric oversight. Some were said to have "emotional" or "psychological" problems. Psychiatric reports were available on all the trainees attached to Feltham. Other types of trainees sent to Feltham were those with physical disabilities, epileptics, etc., but these were not included in the sample.
- c) The Feltham trainees, in general, were a fairly heterogeneous group. Unlike other Borstals, conditions like intelligence, offence and age, did not play an important role in the allocation/

allocation of a trainee to the Borstal.

- d) Feltham is primarily a "closed" Borstal, but it is unique in that after a three months trial period (subject to certain conditions) the trainees can be transferred to an "open" Borstal situated about 10 miles further West, near Marlow in Buckinghamshire.
- e) Feltham Borstal is well equipped for providing psychiatric services to the trainees both in the "open" and the "closed" parts. There are about six psychiatrists attached to the hospital (situated on the premises) who provide psychiatric treatment to the trainee and individual and group therapy

V (2) BORSTAL ALLOCATION PROCEDURE

All young offenders, when sentenced to Borstal training, are transferred from the remand centre to a Borstal allocation centre, normally a part of a prison. During their stay at the allocation centre, an all round assessment of each individual is made as to the suitability for a particular type of Borstal training. Each individual is tested on intelligence, attainment and aptitude tests, interviewed by the governor of the allocation centre, the social worker, the vocational guidance officer and, if required, by a psychologist. Each assessor makes a recommendation independently of the others, as to which type of Borstal would be most suitable for a particular individual. The allocation board also takes into account the nature and the type of previous offences, and if any, probation officers' reports, medical and psychiatric reports.

The main object of the study was to assess the distance and the direction of changes observed in the ratings of selected concepts by Borstal boys. The technique used in the study was Osgood's Semantic Differential./

Differential. The subjects were first asked to rate twenty concepts on twenty scales before they were transferred to the Borstal and the second testing took place just before their discharge. The retesting was completed by the middle of 1970 *.

V (3) THE GROUP

In all, 150 trainees were tested before they were transferred to the Borstal. However, during the course of the training, 41 subjects were "lost" due to various reasons: reallocation and transfer due to changed circumstances, serious behaviour disorders, absconding, and there were cases in which after a trial period, the trainees were considered to be unsuitable for that particular Borstal. While there were no refusals at the time of the first testing, a few refused to take part in the second testing, which took place just before discharge.

The breakdown of losses is as follows:

Transferred, reallocated prior to discharge	17
Absconded (later reallocated)	13
Refused	11
	<hr/>
Total ...	41
	<hr/>

The final sample comprised of 109 subjects who completed Borstal training and took part in first and second testing.

V (4) THE SUB GROUPS/

* The fact that the data of this research were collected in 1968-1970 does not necessarily render this study out of date. There has been no evidence to suggest that the principles and the practice of Borstals have greatly changed during the last 10 years, nor that the trends in juvenile delinquency are substantially different from early 1970. In fact, a report on Feltham Borstal by Williams (1978) confirms this.

In this chapter, whenever possible and relevant, more recent statistics will be provided for comparison. The main source of recent statistics is the New Approaches to Juvenile Crime (January 1980) Briefing Paper No. 3. (See page 10 for details). This document refers to figures up to 1978.

V (4) THE SUBGROUPS

In order to study the differential effect of Borstal training, the sample was divided into four offence groups (namely: Larceny, Drug, Aggressive and Sex) and each offence group was further sub-divided into three intelligence groups (Above Average, Average and Below Average), resulting in twelve subgroups.

As has been discussed earlier, the Borstal in this study specialised in the treatment of emotionally and behaviourally "disturbed" delinquents, therefore, all the subjects in this study had been considered in need of psychiatric help. All delinquents convicted of drug abuse were allocated to this Borstal for treatment. Similarly, all delinquents convicted of sex offences were also allocated to this Borstal for psychiatric treatment.

In addition, there were these delinquents who were judged by their behaviour to have "psychopathic personalities" and serious behaviour disorders. Thirdly, delinquents who were mainly Larceny offenders were considered to be "inadequate" and were recommended a period of psychiatric oversight.

V(4) (i) Subgrouping According to Offence

Each subject in the sample was assigned to one of the above four categories, according to his recent offence and conviction, and the reason for his allocation at the Borstal was also noted. In the "Drug" group, offences like 'taking drugs', 'possessing drugs' and 'drug addiction' were common. In the "Aggression" group, offences like 'malicious damage', 'insulting', 'threatening' and 'disorderly behaviour', 'grievous' and 'actual' bodily harm. In the "Sex" group, 'indecent assault', 'buggery', 'rape', 'incest', 'gross indecency' were rife. The "Larceny" group was marked by offences involving 'stealing'.

'stealing', 'taking and driving away', 'receiving stolen property', 'embezzlement' and 'false pretences'.

The offence groups were further sub-divided according to the intelligence level, as assessed by a non verbal test of intelligence administered as a part of the allocation procedure.

V(4)(ii) Subgrouping according to Intelligence

Each trainee had to take a number of tests, including intelligence tests before allocation. All these tests were standardised on Borstal populations. The scores on any test were transformed into grades (A B C etc.), representing a certain percentage of the standardisation sample. The intelligence test used on Borstal trainees was Raven's Progressive Matrices (Raven 1960) with standard instructions and a time limit of 20 minutes. The following scores and grades with percentage of the delinquent sample represented are based on norms for delinquent populations.

<u>Score</u>	<u>Grade</u>	<u>% of Original Sample</u>
48 +	A	Top 10%
42 - 47	B	next 20%
38 - 41	C +	" 20%
34 - 37	C -	" 20%
26 - 33	D	" 20%
5 - 25	E	bottom 10%

In the present study, the grading was reduced combining the two top grades A and B into one. This was called the 'Above Average' grade (AA) and the grades C + and C - were combined into 'Average' group (A), and grades D and E were combined into 'Below Average' group (BA). In intelligence grouping, only the non-verbal intelligence was taken into account, for various studies have shown a bias against verbal abilities in the delinquent population.

The/

The subgroups data was thought to highlight the effect Borstal training has on different types of delinquents. The classification according to offence was the line which the institutional policy of taking certain types of offenders followed. The classification according to intelligence warrants a comment. The level of intelligence of a trainee is considered an important factor in Borstal training in general. Though intelligence was not considered to be a central factor in allocation of the trainees in this study, the assessment policy implies that delinquents with a high level of intelligence are going to respond differently from delinquents with a low level of intelligence.

There is growing evidence to suggest a close relationship between intelligence and drug addiction. A number of studies (Cockett 1971, Kaldegg 1973, Mott & Taylor 1972) have shown that drug addicts have a particular personality configuration, marked by a high level of intelligence, so what about the addict who is of average or below average intelligence?

Similarly, sexual offences and low intelligence are sometimes associated with each other (Walker 1965), so what about the sex offenders who are not of low intelligence? Furthermore, intelligence level of a respondent has been reported to influence his response style (see Chetwynd 1977). A relationship between intelligence and offence was also found in the response styles of subjects in this study (See Chapter IX). In view of the evidence available, the subclassification of the sample according to intelligence was considered more valid than putting different individuals together, disregarding this critical factor of personality.

The sample was divided into four offence categories, Larceny (L), Drugs (D), Aggression (A) and Sex (S). Each offence group was further divided according to three intelligence levels, Above Average (I)/

(I), Average (II) and Below Average (III), giving a total of twelve subgroups. The subgroup and the number of subjects in each are as follows:

<u>OFFENCE</u>	<u>INTELLIGENCE</u>			<u>TOTAL</u>
	<u>I</u>	<u>II</u>	<u>III</u>	
L	16	16	7	39
D	16	9	5	30
A	7	6	8	21
S	7	5	7	19
	<u>46</u>	<u>36</u>	<u>27</u>	<u>109</u>

V (5) THE BACKGROUND INFORMATION

The background information data on each individual subject was gathered from the record files and recorded on a standard information sheet (see appendix A). The data consisted of personal facts, history of previous convictions and sentences. The probation officers' reports and the social workers' histories provided detailed information about the home and family background and an account of the offender's behaviour. In most cases psychiatric reports highlighted any problems an offender may have. A summary of the data relating to the sample is as follows:

The mean age of the group at the beginning of the study was 19.28 years (S.D. 1.28) The youngest subject in the sample was 16 years old and the oldest was 21.

V(5)(i) Age at the First Conviction

The mean age at first conviction for the group was 14.68 years* (S.D. 2.65)/

*New Approaches to Juvenile Crime (January 1980) reports peak age of 15 years for population.

(S.D. 2.65) Table below shows the ages when the subjects were convicted for the first time.

		Age in Years													
		8	9	10	11	12	13	14	15	16	17	18	19	20	21
No. of First	Convictions:	2	2	4	6	8	11	16	18	9	19	8	5	0	1

The above table shows that the incidence of first convictions increased with age until it reached the peak at 14 and 15 years. There is also another peak for first conviction at the age of 17. Various studies have shown more or less a similar trend in the incidence of first convictions among juvenile delinquents. West (1973) and McKissach (1967) have linked the peak incidence to the last year of compulsory schooling. The peak age was 13 before the Second World War when the school leaving age was 14. In the post-war period it became 14 when the school leaving age was raised to 15.

The reasons for the second peak in the sample are not very clear. It may be that after leaving school the juvenile does not have the counselling and support of the school social services. After 16, pressure to leave home becomes greater and he is exposed to socio-economic conditions conducive to delinquent behaviour.

V(5)(ii) The Type and Frequency of Previous Convictions

The total number of convictions prior to the present one was 383. (Mean 3.51, S.D. 1.89). The minimum number of previous convictions of a subject was 1, and maximum was 8 convictions.

Various offences were grouped together to form four main categories. The 'Larceny' group included crimes of dishonesty, e.g. stealing, breaking and entering, fraud, forgery, handling and receiving of stolen property. The 'Drug' group included offences like the illegal possession of prohibited drugs. The 'Aggression' group/

group included assault, insulting and threatening behaviour, actual bodily harm, robbery with violence, wilful damage and arson. The 'Sex' group included indecent assault, rape and indecent exposure.

The table shows the frequency of each category of offences committed by the sample and the percentage of the total convictions.

<u>Offence Group</u>	<u>Frequency</u>	<u>Percentage</u>
Larceny	207	54.05
Drugs	62	16.19
Aggressive	81	21.15
Sex	33	8.62
Total	<u>383</u>	

* Over half of all the offences were convictions for petty thieving. The preponderance of this group is consistent with the national statistics (West 1973), though the actual proportion of larceny has been reported as high as 89% to 92% in the general delinquent population.

Of the rest of the groups, aggressive behaviour accounted for 21.15% of all convictions, followed by drug offences and sex offences

V(5)(iii) Previous Custodial Sentences

Of the 109 subjects, 93 had at least once served custodial sentences/

*New approaches to Juvenile Crime (January, 1980) report that in 1978 the majority of juveniles received at Borstals (55%) had been convicted of burglary and 28% of theft, handling stolen goods, fraud and forgery. 15% were involved in violence and robbery and 1% of sexual offences.

Due to the allocation criteria at Feltham, these figures are not strictly comparable with those in the sample. However, the offence groups and the proportion of previous convictions indicate that larceny and violence offences have somewhat similar distribution. Since all drug abusers and all sex offenders were automatically allocated to Feltham Borstal, these figures are not strictly comparable with their incidence in general population.

sentences. The mean for the custodial sentence is 1.55. There were 16 subjects for whom the present Borstal sentence was to be the first custodial sentence.

The breakdown of 144 custodial sentences for the group of 93 subjects is as follows.

<u>Type of Custody</u>	<u>Number.</u>
Approved School	65
Detention Centre	45
Condition of Residence	15
Medical/Psychiatric Supervision	13
Borstal Training.	6
	<u>144</u>

* The majority, 76.39% of sentences were related to custodial periods in Approved Schools and Detention Centres. The Condition of Residence applied mainly to minors. Medical/Psychiatric Supervision applied mainly to those who were addicted to hard drugs. There were also some instances of severe behaviour disorders sentenced to Compulsory Medical/Psychiatric Treatment.

V(5)(iv)Home Background

Information regarding the family and home background was gathered/

*Perhaps the following comparison of some statistics for 1968 and 1978 would show the changes in the rate of crime and sentencing patterns of courts during these ten years.

The crime rate appeared to have greatly increased. In 1968, male juvenile offenders (aged 10 - 17) amounted to 26% of persons found guilty: this figure rose to 44% in 1978. Similarly, the number of male offenders (aged 14 and under 21) found guilty rose from 9,563 in 1968 to 14,543 in 1978. The number of juveniles committed to Borstals rose from 818 in 1969 to 2,117 in 1978.

Footnote continued on p.151

gathered mainly from social workers' and probation officers' reports. Such reports were an integral part of the record files. Since the information thus obtained was mainly subjective and descriptive, a standardised method of classifying the information could not be employed. Other methods of gathering detailed knowledge of socio-economic factors, like interviews and home visits, fell beyond the scope of this study. However, a description of the family structure and the delinquent's relationship with parents was a consistent feature of the reports.

The number and the proportion of subjects coming from broken homes was also looked into. A broken home has been defined as a permanent separation, due to death, desertion or divorce, from one or both natural parents by the time a delinquent has reached his 15th birthday (West 1973). Broken homes have been associated with future delinquency in a number of studies (McCord & McCord 1958; Gibson 1969). In this sample, 62 (56.88%) subjects had come from broken homes, according to the above definition. The proportion of broken homes is much higher in comparison to other general population surveys on delinquency/

Contd. Footnote P.150.

<u>Sentencing Pattern</u>	<u>Males 14 - 17</u>	
	<u>Percentage of Juveniles Found Guilty</u>	
	<u>1968</u>	<u>1978</u>
Conditional Discharge	19	19
Probation/Supervision	24	14
Fine	35	40
Attendance Centre	7	11
Approved School	7	4
Detention Centre	4	9
Borstal Training	2	3

From the above table, it seems that the use of condition discharges and fines has increased over the decade and less use was made of probation and supervision. The proportion of young offenders sent to Detention Centres and Borstals has increased.

delinquency (e.g. West 1973). This sample is selected, for most of the subjects had had a long history of delinquency and a greater number of reconvictions than those reported in other studies. In the West (1973) study the average number of previous convictions per delinquent was 2.2, whereas in this sample, the figure is 3.61 convictions.

According to the home background, as described by social workers' and probation officers' reports, the present sample has been divided into two groups. One, in which the delinquents have had a separation from their natural parents in early life and the second group, in which the delinquent lived with his natural parents until he was 15 years old. The following is a breakdown of home backgrounds for both groups.

Natural Parents Absent = 62

Both parents absent
(Institutional upbringing) = 8

Adopted/foster parents = 6

Step-parents = 10

Mother absent, father
present = 6

Father absent, mother
present = 32

Natural Parents Present = 46

'Good' relationship with both
parents = 9

'Poor' relationship with
father = 22

'Poor' relationship with
mother = 11

'Poor' relationship with both
parents = 4

Of the 62 cases with at least one experience of a broken home, only 16 (25.8%) had had substitute parents. Mother alone had been present in the majority of cases. The presence of father as the only parent was rare.

Grygier (1969) has emphasised the view that family break and disruption of family relationships are significantly linked with delinquency, and separation alone is not sufficient to account for delinquent behaviour. Of the 46 cases in which the physical structure of the family is intact, i.e. both parents present, in 37 cases (80%) the/

|*This information on one subject was not available

the relationship between the delinquent and one or both parents has been reported to be 'poor'. In nearly half the cases, the relationship of the delinquent with his father has been described as 'poor'.

'Poor' relationship with mother is reported in nearly 24% of the cases. A small proportion of cases (8.7%) had 'poor' relationship with both parents. 'Good' relationship between the delinquent and both parents has been reported in 19.6% of the cases.

V(5) (v) Neuroticism and Instability

As has been described earlier, the sample of this study was also considered to be 'disturbed' and in need of psychological or psychiatric help. Psychiatric reports were available on all cases in this group. Following is a summary of descriptions used in the psychiatrists' reports, to denote the delinquents' personalities.

			<u>Percentage of Sample</u>
Emotionally disturbed	=	56	51.38
Behaviour disorder			
Psychopathic traits	=	28	25.69
Severely depressed			
history of suicide	=	8	7.34
Socially inadequate			
shy and neurotic	=	15	13.76
Others	=	2	1.83
		<u>109</u>	

V (6) SOME FEATURES OF BORSTAL TRAINING

V(6) (i) Treatment Received

A certain proportion of the trainees received psychotherapy at Feltham (and Finamore Wood Camp). Such a facility is offered to those who 'want to be helped'. Psychotherapy was done by trained psychiatrists for half-an-hour, once a week. The duration of therapy depended on the individual cases. The maximum duration of therapy in the sample was 30 weeks. No-one received therapy for less than 18, or more than 30 weeks. The therapy group included both individual and group/

group therapy. 42 trainees received therapy and 67 trainees did not.

V(6)(ii) Term of Training

By law a Borstal trainee is required to undergo training for not less than six months and not more than two years. The Borstal governor has the authority to discharge a trainee at any time between those limits if he is satisfied that he has benefited from the training and he is capable of leading a normal life outside. The decision regarding the discharge of a trainee is made according to the recommendation of all staff concerned and the monthly reports by the housemaster on how favourably he is responding to the discipline and training.

The mean length of training for the group is 43.57 weeks.

(S.D. 12.37).

		<u>No. discharged</u>
a) Short-term	up to 31 weeks	17
b) Medium-term	32 to 55 weeks	54
c) Long-term	56 to 110 weeks	38

V(6)(iii) "Open" and "Closed" Groups

All those trainees allocated to Feltham are reviewed after a period of three months, and if, in the opinion of the staff, a trainee is suitable for more freedom, i.e. he is not likely to abscond or commit any other offence, he is then transferred to Finamore Wood Camp's 'open' conditions. The open Borstal, in fact, is like a hostel where the trainees are free to move about on their own. They may even go out to the town nearby to work and come back to the 'camp' and stay there overnight. This practice continues until the trainee is discharged. In the case of absconding, or committing an offence, a trainee may be sent back to Feltham to stay under 'closed' conditions for the rest of the time. 27 trainees finished the/

the training under 'open' conditions, while 82 remained in the 'closed' condition. *

V(7) SUMMARY

The family background and criminal history of the sample of 109 delinquents sentenced to a Borstal training with specific emphasis for the provision of psychiatric help, has been briefly described.

All the subjects were considered delinquent as well as disturbed in a psychiatric sense. In comparison with the longitudinal studies, the boys in this sample are older, have more previous convictions, a longer history of delinquency with most of them having served at least one custodial sentence on their records. The home and family background data showed that a higher proportion of these subjects came from broken homes and had disruptive relationships within the family. However, the types and frequencies of their previous offences are not different from other comparable groups of delinquents. The training that they received in this Borstal is similar to that given at other Borstals. Psychiatric treatment was provided for those subjects who were considered to need it. Group and individual psychotherapy was given on the recommendation of the psychiatrists.

Background data has been gathered and described in order to substantiate and to provide a framework for the interpretation of the results. This study will focus on changes in the ratings on concepts thought relevant to a delinquent's criminal behaviour and his home and family background.

*The relationship between test-retest changes and psychotherapeutic treatment, length of term and open/closed allocations was not studied due to the arbitrary practices and policy changes within the Borstal. Furthermore, the number of subjects was too small to study an inter-relationship between all such factors. The final analysis was confined to only two factors, namely: Offence and Intelligence.

CHAPTER VI

PROPOSED DESIGN AND METHODOLOGY

AND

PILOT EXPERIMENTS.

The method of selection of the subjects in this study has been described in the last chapter. The initial sample consisted of 150 Borstal trainees allocated to Feltham Borstal. Each trainee was given a standard set of 20 concepts to rate on a specially prepared 20 scale standard Semantic Differential format, before and after the training. The first testing took place at the allocation centre just before a trainee transferred to the Borstal to commence his training. The second testing was carried out just before discharge at the Borstal itself. As has been mentioned before, 109 subjects of this initial sample, who completed both first and second testing comprised the sample in this study. Following is a detailed account of the proposed design and methodology of this study.

VI (1) SELECTION OF SEMANTIC DIFFERENTIAL SCALE

The Semantic Differential scales were selected according to their high factor loadings reported in the literature (Osgood et al 1957 : Osgood 1962 : Marks 1966). Twenty scales were tentatively selected to represent three principal factors, namely: Evaluative, Potency and Activity. The number of scales representing each factor was determined by the relative importance of the factor, i.e. the proportion of variance it accounts for. Thus the format of the 20 scales consisted of 9 Evaluative, 6 Potency and 5 Activity scales. The scales and the factors are said to represent are given in Table 6.1.

TABLE 6.1

SEMANTIC DIFFERENTIAL SCALES USED AND FACTORS THEY ARE SUPPOSED TO REPRESENT. (Osgood et al 1957 : Osgood 1962).

Evaluative Scales : 9

1	*Good	-	Bad
2	Beautiful	-	Ugly
5	Useful	-	Worthless
6	*Kind	-	Cruel
9	*Pleasant	-	Unpleasant
12	Nice	-	Awful
15	*Fair	-	Unfair
17	Changeable	-	Unchangeable
18	Positive	-	Negative

Potency Scales : 6

3	Strong	-	Weak
7	*Rough	-	Smooth
10	*Hard	-	Soft
13	Rugged	-	Delicate
16	*Intense	-	Mild
20	Masculine	-	Feminine

Activity Scales : 5

4	*Fast	-	Slow
8	*Active	-	Passive
11	*Tense	-	Relaxed
14	*Excitable	-	Calm
19	Complex	-	Simple

The numbers indicate the order of presentation in the format. Each scale was assigned a score of 1 for the scale polarity in the first column and up to 7 for the scale polarity in the second column.

*Denotes where, in actual presentation, the scale polarities were reversed to avoid response bias (See Appendix B).

VI (2) SELECTION OF CONCEPTS

From those aspects of delinquency considered important in the literature, twenty concepts representing four areas were selected (see Table 6.2). The choice of the concepts, it can be argued was somewhat arbitrary. However, while no attempt was made in this investigation to encompass any particular area of the delinquent's life or any particular feature of delinquency or Borstals, the selection of the four classes of concepts, namely, Personal, Emotional, Social and Delinquent concepts, was aimed to provide a broad view of the delinquent's own attitudes and the effect Borstal training has on the delinquent.

TABLE 6.2

LIST OF CONCEPTS USED
Separated in 4 Groups

<u>GROUP</u>	<u>No.</u>	<u>CONCEPTS</u>
A. Personal	5.	1. Myself
		2. My Ideal Self
		3. My Father
		4. My Mother
		5. My Family
B. Emotional	5.	10. Aggression
		11. Love
		12. Sex
		13. Guilty Feelings
		14. Excitement
C. Social	5.	9. Prison Officers
		17. My Mates
		18. Other People
		19. Work
		20. Life Outside
D. Delinquency	5.	6. Discipline
		7. The Law
		8. The Police
		15. My Offence
		16. Borstal Training

Numbers relate to the order of presentation of Results.

For the order of presentation to the subject - see Appendix.

VI(3) TESTING PROCEDURE

The "Allocation Board" sat almost daily and at the end of each day the tester collected the names of all those who were allocated to Feltham. A standard information sheet (see Appendix A) was prepared to collect all the relevant data on each individual trainee from the prison records. Such data included all previous convictions and sentences and the age at which each offence was committed, present offence, brief family background, any recommendation for particular treatment or training and general remarks made by the psychiatrist at the remand centre and reports made by social workers and probation officers. One week's allocations were tested the following week in groups of four. If there were less than four in a week, the testing was postponed until such a number was obtained. Since the average length of time between allocation and transfer was about four weeks, it was made sure that everyone in the sample should be tested within two or three weeks of allocation

VI(3)(i) First Testing : Test Instruction

The four subjects were seated in four corners of the testing room and the instructions were given in the following manner:

"The test you are going to do has got nothing to do with your allocation, training or offence. It is only a part of a research being done at Wormwood Scrubs. The object of this research is to find out what certain ideas or people mean to you. We would like you to judge each one of these ideas or people against a series of descriptive scales like Good or Bad, Beautiful or Ugly and so on. On each page of this booklet (shown) you will find a different idea or concept at the top, and underneath it is/

is a set of scales, and between the two words of each scale there are seven 'steps' showing the degree of likeness to one end of the scale or the other".

(At this stage the tester gave out the booklet).

"Please don't turn over the first page. On the top of this page we have a concept 'Holiday'. This is purely for practice. Let us fill in a few of the scales together".

(Tester explains the following examples on the blackboard).

"Now, if you feel that the concept is very closely related to one end or the other end of the scale you should place your check thus:

GOOD X _____ BAD

(Meaning holidays are very good)

or GOOD _____ X BAD

(Meaning that holidays are very bad

"If you feel that the concept is quite closely related to one or the other end of the scale then check thus:

USEFUL _____ X _____ WORTHLESS

(Meaning holidays are quite useful)

or USEFUL _____ X _____ WORTHLESS

(Meaning holidays are quite worthless)

"If you feel that the concept is only slightly related to one or the other end of the scale then check thus:

PLEASANT _____ X _____ UNPLEASANT

(Meaning holidays are only slightly pleasant)

or PLEASANT _____ X _____ UNPLEASANT

(Meaning holidays are only slightly unpleasant).

"Now, if you feel that the concept on a particular pair of words has an equal degree of association with both ends of the scale, (for example if it is equally Good and Bad)

or/

or if you find that the words are quite irrelevant to this concept, then check thus:

WISE — — — X — — — FOOLISH

Always put your 'X' just above the line and not in between the lines. Now, I would like you to start filling in all the scales on the concept 'Holiday', and if you have any difficulty, you can ask me while you are doing the practice concept. After that you will be on your own. Please let me know when you have finished the practice concept and do not proceed until you are told to do so".

(The tester went round to see if each subject had understood the instructions, and had satisfactorily completed the practice concept, and answered any queries.)

After the practice concept was completed correctly, each subject was given the following instructions:

"Before you go on to the actual test, I just want you to bear in mind that all the information which we are going to collect through this questionnaire will be treated as strictly confidential and will not be used for any purpose other than research, so try to be as frank and truthful as you possibly can. There are no right or wrong answers and no pass or fail on this test. It is your personal opinion that is required.

Do this test fairly quickly, do not stop and puzzle out or worry over your answers. It is your first impression, your immediate feelings that are wanted.

Do not look back or further through the items, do not pass over any items, do them in the order in which they appear in the test. In all, you have twenty concepts in this booklet and twenty scales for each concept. Most boys finish in twenty/

twenty minutes, and, although there is no time limit, it should not take you more than thirty minutes to complete the whole test."

The subjects were not allowed to confer during the test. At the end of the test, each booklet was checked to make sure that all the items were filled in.

VI(3)(ii) Second Testing

The fortnightly discharge list was collected at Feltham and the subjects were retested within the last two weeks before discharge, either at Feltham or at Finamore Wood Camp. Instructions and procedure of the first testing were repeated with the exception of the introduction

VI(4) THE PILOT STUDY

The prepared format was first given to twenty trainees of varying degrees of intelligence and different offence groups. The subjects were tested in groups of fours and fives and their reactions and opinions about the test were requested. In view of the difficulties encountered by the first twenty tested, the original instructions were later modified and a practice concept 'Holiday' was included to rate like any other concept. This was considered essential to ensure that everybody fully understood the instructions and had had sufficient practice before attempting the actual questionnaire. The revised instructions included statements aimed at alleviating anxieties and fears that might be felt by the trainees awaiting transfer and training. It was made explicit that the test did not have any bearing upon their training term or discharge. However, they were not warned about the second testing at the time of first testing. It was also felt necessary to alter the wording of some of the concepts. For instance 'I am' and 'I would like to be' replaced * the concepts 'My Self' 'My Ideal Self'. 'Policemen are' was replaced by 'The Police'. This was done/

* See Appendix B for the list of concepts and order of presentation.

done to make these concepts less personal. The trainees tested in the Pilot Study were not included in the sample.

VI(5) RELIABILITY TESTING

Evidence for test-retest reliability of the Semantic Differential has been produced by various research workers (Osgood 1957 : Luria 1959 : Bopp 1955 : Norman 1959). The Evaluative scales have been found to be of highest test-retest reliability, followed by Potency and Activity scales. The test-retest reliability of the Semantic Differential can be measured in two ways; by correlation coefficient r and in terms of absolute deviation in the scale units. Norman(1959) and Marks (1965) found that either value is equally useful as a measure of stability. Although the reliability of Semantic Differential technique is fairly well established, two factors play an important role in the consistency of the measure. To what extent can a change in test-retest scores be attributed to the unreliability of the instrument or instability of the concepts measured? Furthermore, since the reliability of the Semantic Differential also depends on the concepts and scales used and the purpose of the investigation and the subjects, it is imperative for any investigator using this technique to establish its own reliability.

There are different ways to establish the reliability of studies using the Semantic Differential technique (see Chapter IV). For the purpose of establishing reliability for the present study, the test-retest reliability of each of the twenty concepts, for each of the three factors, Evaluative, Potency and Activity were considered sufficient.

VI(5)(i) Method

From the first testing sample, every tenth subject was retested after one week of the first testing.

The testing procedure remained the same as the first testing. A total of fifteen trainees were retested in this manner. The two scores/

TABLE 6.3

TEST-RETEST RELIABILITY - CORRELATION COEFFICIENT (r) : Product-Moment
for Three Factors Separately.

	<u>CONCEPT</u>	<u>EVALUATIVE</u>	<u>FACTORS</u>	
			<u>POTENCY</u>	<u>ACTIVITY</u>
1.	Myself	.87	.76	.78
2.	My Ideal Self	.85	.80	.75
3.	My Father	.88	.69	.65
4.	My Mother	.95	.74	.69
5.	My Family	.74	.68	.64
6.	Discipline	.81	.76	.63
7.	The Police	.77	.81	.74
8.	The Law	.74	.82	.80
9.	Prison Officers	.66	.75	.70
10.	Aggression	.89	.72	.62
11.	Love	.61*	.66	.63
12.	Excitement	.71	.75	.84
13.	Guilty Feelings	.81	.73	.74
14.	Sex	.79	.55*	.71
15.	My Offence	.88	.79	.81
16.	Borstal Training	.91	.85	.83
17.	My Mates	.81	.80	.79
18.	Other People	.63	.58*	.53*
19.	Work	.92	.62	.68
20.	Life Outside	.71	.92	.63

All correlations are significant $p < .01$ level, except r's marked*

$p < .025$ level

N = 15

scores of Evaluative, Potency and Activity scales, for each of the fifteen trainees were calculated by Product-moment correlation.

The r 's were calculated for each concept separately.

VI(5)(ii) Results

The test-retest correlations for each of the twenty concepts and for each of the three factors, Evaluative, Potency and Activity were calculated separately. The results are presented in Table 6.3. The significance of correlations indicates that, on the whole, the test-retest relationship was quite high. The Evaluative factor has, on the whole, the highest correlation (.80), followed by Potency (.74) and Activity (.71).

The results also show that certain concepts have higher test-retest reliability, e.g. Self (1), Ideal Self (2), My Offence (15) Borstal Training (16), Mates (17) and so on. Other concepts have relatively low reliability, e.g. Family (5), Love (11) and Other People (18). However, one can reasonably conclude, from the results, that the test-retest reliability of the Semantic Differential is reasonably high.

VI(6) PILOT EXPERIMENT

VI(6)(i) FACTORIAL STRUCTURE OF SCALE AND PRINCIPAL COMPONENT ANALYSIS

Osgood et al (1957: Osgood 1962) presenting the three dimensional theory of meaning asserted that the factorial structure of scales remains the same across different subjects and different concepts. Although he acknowledges the concept-scale interaction in that the meaning of a scale changes with a change in the context, he, and most users of the Semantic Differential technique ignored this issue. A number of studies have brought out that the Osgood assumption regarding the generality of factor systems does not hold. Presley (1969) for example, has demonstrated this very/

very clearly. He found that the different scales have different, significantly different, correlations with each other on a number of different factors, and, therefore, an overall factor analysis of scales, using different concepts, or even an overall intercorrelation of scales, in fact, produces a false picture of the factor structure of the scales.

In the present study, the selection of scales was made according to Osgood's original recommendations. Of the twenty scales, nine were said to have high loadings on the Evaluative factor, six on the Potency factor and five scales on the Activity factor. The same format was used for rating twenty different concepts. Before any meaningful analysis of the data was carried out, it was thought to be necessary to ascertain the underlying theoretical assumptions of the Semantic Differential scales. The hypotheses about the generality factors systems were formed and tested in the following manner.

Hypotheses :

In order to test Osgood's assumptions the First Testing data was analysed to ascertain ...:

- a) Whether, for this group of delinquent subjects, the factor structure of scales was the same as predicted by Osgood (1962) and
- b) whether the factor structure of scales remained the same for different concepts used in this study.

VI(6)(ii) Method :

In the first instance, the twenty scales were factor analysed by means of Principal Component methods with Varimax Rotation (using BMDX72 computer Prog.) for 109 subjects with all the twenty concepts together. In the second stage, Principal Component analysis was performed on the twenty scales for each of the twenty concepts individually. The factor loadings and intercorrelations of scales were examined.

VI(6)(iii) Results :

VI(6)(iii) Results :

The results are summarised in Table 6.5 and Table 6.6

Table 6.5 presents a summary of the factor structure of the Evaluative, Potency and Activity scales used, and shows the principal factors on which the scales are now found to have high loadings. The results are presented for each individual concept as well as for all concepts. Full details of factor loadings are presented in the Appendix (C).

The results show that seven of the nine Evaluative scales have high over-loadings on the first factors as predicted by Osgood. The two scales "Changeable-Unchangeable" and "Positive-Negative" do not have a high loading on the first factor. The latter seems to have an acceptably high loading on Activity factor instead. Of the six Potency scales, four scales have high loadings on the second factor. Scales like "Rough-Smooth", "Intense-Mild" have high loadings on Evaluative and Activity factor, respectively. Of the five Activity scales, only two have a high loading on the third factor. "Fast-Slow" has a high loading on Evaluative factor, while "Active-Passive" and "Complex-Simple" have a high loading on the Potency factor. These results show that, while most of the Evaluative scales have a high loading on the Evaluative factor in this study, the Potency and Activity scales are different in their relationship to these factors to which they were assigned.

A similar picture is presented by a correlation matrix of the scales across all concepts. The results are presented in Table 6.4 and show that, while seven of the nine Evaluative scales have a high correlation with one another, two scales, "Changeable-Unchangeable" and "Positive-Negative" have a generally low correlation with each other and with other Evaluative scales. The scales said to belong to the Potency factor have a generally low correlation with one another.

The/

TABLE : 6.4

CORRELATION MATRIX OF SEMANTIC DIFFERENTIAL SCALES ACROSS ALL CONCEPTS

SCALES										SCALES									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Good-Bad																			
2. Beautiful-Ugly	.60																		
3. Useful-Worthless	.61	.49																	
4. Kind-Cruel	.61	.51	.54																
5. Pleasant Unpleasant	.65	.61	.53	.70															
6. Nice-Awful	.67	.64	.54	.71	.79														
7. Fair-Unfair	.62	.51	.53	.68	.67	.68													
8. Changeable-Unchangeable	.10	.12	.11	.10	.13	.11	.07												
9. Positive-Negative	.20	.23	.28	.20	.21	.19	.21	.02											
10. Strong-Weak	.32	.33	.45	.28	.29	.28	.28	.09	.29										
11. Rough-Smooth	-.36	-.47	-.33	-.53	-.47	-.49	.42	-.10	.14	-.12									
12. Hard-Soft	-.17	-.33	-.12	-.30	-.31	-.32	.22	-.04	.05	.07	.49								
13. Rugged-Delicate	-.26	-.34	-.18	-.36	-.34	-.36	.31	-.05	-.01	-.01	.39	.40							
14. Intense-Mild	-.15	-.24	-.18	-.28	-.22	-.23	.25	-.01	-.09	-.09	.30	.25	.14						
15. Masculine-Feminine	-.06	-.09	.02	-.11	-.08	-.10	.03	.02	.09	.19	.17	.30	.33	.04					
16. Fast-Slow	.33	.25	.34	.30	.31	.32	.34	.09	.12	.41	.12	.07	-.02	.00	.14				
17. Active-Passive	.18	.04	.22	.10	.12	.12	.17	.02	.07	.22	.09	.25	.12	.07	.17	.34			
18. Tense-Relaxed	-.28	-.38	-.32	.37	-.39	-.41	.32	-.01	-.19	-.24	.39	.28	.25	.36	.05	.12	.05		
19. Excitable-Calm	-.01	-.05	-.10	.09	-.02	-.02	-.11	.08	-.10	-.07	.13	.07	.05	.35	-.07	.04	.07	.29	
20. Complex-Simple	.01	.07	.12	.02	.03	.03	.00	.15	.15	.15	.02	.07	.06	.12	.12	.12	.09	.03	.02

TABLE: 6.5

SUMMARY OF FACTOR ANALYSES (Principal Component, Varimax Rotation).
FACTORIAL COMPOSITION OF EACH INDIVIDUAL CONCEPT.
(and Factorial Composition across all concepts).

SCALES	INDIVIDUAL CONCEPTS																				ALL Concepts
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Evaluative	Good-Bad	?	E	E	E	E	E	E	E	E	E	E	7	E	E	E	E	?	E	E	E
	Beautiful-Ugly	6	A	E	E	E	E	E	E	E	E	E	7	E	E	E	E	?	E	E	E
	Useful-Worthless	P	A	E	E	E	E	E	E	E	E	E	5	E	E	E	E	E	E	E	E
	Kind-Cruel	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	Pleasant-Unpleasant	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	Nice-Awful	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	Fair-Unfair	?	E	E	E	E	E	E	E	E	?	E	E	E	E	E	E	E	E	E	E
	Changeable-Unchangeable	4	6	5	6	4	P	A	4	A	4	A	6	E	A	?	4	4	A	A	A
	Positive-Negative	P	A	4	5	E	P	5	5	A	E	4	5	E	A	4	5	6	A	A	A
																					A/4
Potency	Strong-Weak	P	A	?	5	E	A	P	E	A	E	4	4	4	P	E	?	5	?	?	E/P
	Rough-Smooth	?	?	P	P	E	E	P	6	?	?	A	A	A	E	?	E	?	P	P	E/P
	Hard-Soft	5	P	P	4	A	E	P	P	?	P	5	A	A	P	P	P	A	P	P	P
	Ruined-Delicate	5	P	P	4	A	E	P	P	?	5	6	P	P	E	?	?	P	5	?	E/P
	Intense-Mild	A	5	A	P	P	E	A	P	P	P	P	?	A	A	?	A	5	P	?	A
	Masculine-Feminine	5	P	P	P	4	E	P	P	?	6	A	P	4	P	A	P	P	4	P	P
Activity	Fast-Slow	P	?	E	E	E	A	P	E	P	A	?	4	?	P	E	P	?	E	E	E/P
	Active-Passive	P	P	E	E	E	E	P	?	P	A	5	4	E	P	E	P	P	4	4	A
	Tense-Relaxed	P	A	P	P	P	E	P	4	P	P	A	A	E	?	?	A	A	P	P	E/A
	Excitable-Calm	P	4	A	P	A	5	A	4	P	P	P	A	P	A	A	A	?	P	P	A
	Complex-Simple	4	5	4	A	A	A	5	5	4	4	E	E	5	4	A	5	4	A	P	4

Minimum Loading taken into account = .30.

CODES: E = Evaluative Factor.

P = Potency Factor.

A = Activity Factor.

4,5,6 or 7 = High Loading (.30+) on 4th, 5th, 6th or 7th factor.
? = Dubious: with High loading on more than one factor.

For details of factor loading on individual concepts see Appendix - C

TABLE : 6.6

CORRELATION BETWEEN SELECTED SCALES ON INDIVIDUAL CONCEPTS.

SCALES		CONCEPTS																				CORRELATION OVER ALL CONCEPTS - RANGE	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
<u>EVALUATIVE</u>																							
Row	1. Good-Bad																						
	and																						
A	2. Beautiful-Ugly	.29	.30	.55	.38	.51	.37	.63	.36	.55	.63	.70	.35	.45	.50	.66	.56	.43	.24	.58	.54	.60	.29 to.70
B	1. Good-Bad																						
	and																						
B	3. Useful-worthless	.36	.18	.65	.57	.52	.63	.65	.67	.72	.54	.49	.45	.39	.48	.46	.62	.38	.15	.50	.54	.61	.15 to.72
C	4. Kind-Cruel																						
	and																						
C	5. Pleasant-Unpleasant	.57	.52	.71	.70	.69	.44	.64	.68	.72	.74	.53	.52	.51	.36	.52	.62	.70	.31	.59	.69	.70	.31 to.74
D	4. Kind-Cruel																						
	and																						
D	6. Nice-Awful	.40	.63	.79	.68	.71	.47	.68	.71	.75	.79	.49	.38	.60	.34	.60	.61	.65	.35	.66	.66	.71	.34 to.79
<u>POTENCY</u>																							
E	11. Rough-Smooth																						
	and																						
E	12. Hard-Soft	.41	.50	.42	.36	.32	.48	.21	.12	.41	.73	.47	.48	.38	.26	.36	.33	.50	.24	.56	.53	.49	.12 to.73
F	11. Rough-Smooth																						
	and																						
F	12. Rugged-Delicate	.35	.34	.27	.32	.31	.44	.30	.12	.10	.50	.39	.36	.07	.32	.25	.40	.29	.19	.40	.15	.39	.07 to.50
<u>ACTIVITY</u>																							
G	16. Fast-Slow																						
	and																						
G	17. Active-Passive	.31	.33	.61	.26	.50	.06	.39	.34	.57	.43	.28	.27	.16	.19	.28	.19	.46	.43	.40	.32	.34	.06 to.57

The scale "Strong-Weak", considered fairly representative of the Potency factor, has a low correlation with all other scales on the same factors. The overall correlation among the Potency scales ranges from $-.09$ to $+.49$. The Activity factor scales ^{have} fare the worst. They have, on the whole, a very low correlation with one another, ranging from $-.07$ to $+.39$.

Furthermore, some of the Evaluative scales, in fact, have high correlations with Potency and Activity scales as well, e.g. "Kind-Cruel" with "Rough-Smooth"; "Useful-Worthless" with "Strong-Weak".

The concept by concept analysis shows that, while Evaluative factors, by and large, are fairly consistent, there is some variation in the factorial structure of some of the scales on different concepts. "Beautiful-Ugly" and "Useful-Worthless" (Evaluative scales) have high loadings on Potency for concept I, i.e. "Myself" and on Activity factor on concept II "Ideal Self". Apart from other minor variations the first seven scales are predominantly Evaluative. On the Potency and Activity factors, however, the picture is totally different. The factor structures of these scales varies markedly from concept to concept. The overall factor loading of most of the scales on the Potency and Activity factors gives a totally false picture. This variation of factor structure makes any attempt to ascertain individual scales to any of the factors meaningless.

The concept-scale interaction was also studied in terms of variations in correlation between pairs of selected scales over various concepts. Scales were selected for their high loadings on their respective factors and paired for their known high overall loadings on the same factor. The correlation between the seven pairs selected in this way was examined for each of the twenty concepts. The results are presented in Table 6.6 .

The pair A has an overall correlation of $.60$ and the range is from/

from .25 to .70. The correlation fails to reach the minimum significance level on five of the concepts. Pair B, with an overall correlation of .61 has a wider range of .15 to .72 and on three concepts the correlation fails to reach the significance level. Pair C fails to reach the significance level on only one concept. The overall r is .71, but the range remains wide, from .31 to .74. For the pair D, the correlation fails to reach the significance level on two concepts. The overall correlation is .71 and the range .34 to .79.

The correlation between the Potency scales in Pair E fails to reach significance level on eight of the twenty concepts. The overall correlation is .49 and the range .12 to .73. Pair F fails even more. The correlation between the scales fails to reach the minimum significance level on 15 of the twenty concepts. The overall correlation is .39, while the range is .07 to .50.

The Activity scale in the Pair G fails to reach significance level on twelve of the twenty concepts. The overall correlation is not significant ($p > .05$), the range being .06 to .57

VI(6)(iv) Discussion of Results

The above results show that, taking the whole sample together, the Evaluative factor appears quite consistently as it was predicted by Osgood and his co-workers (1957 : Osgood 1962). The majority of Evaluative scales do have high loadings on the Evaluative factor. In addition, those scales which are supposed to belong to Potency or Activity factors also have high loadings sometimes, on Evaluative factors also.

The concept by concept factor analysis raises very serious doubts as to the validity of Osgood's assumptions. An examination of/

of factor loadings of scales across concepts shall suffice to illustrate the limitations of assigning scales to factors and factors to concepts. The seven Evaluative scales have high loadings on the first factor, as predicted, even though there are some variations on certain concepts. There are Potency and Activity scales that also have high loadings on E factor as well. The Potency and Activity factor scales loadings vary considerably from concept to concept. There appears to be a concept-scale interaction that invalidates Osgood's assumptions about the generality of the factor system. The Evaluative scales, for example, "Beautiful-Ugly" and "Useful-Worthless" have high loadings on the Potency factor, and concepts like "Self", and on Activity factors like "Ideal Self". In the context Discipline, "Useful-Worthless" has a high loading on Potency factor. It is interesting to note that the concept 6 (Discipline) has a factor structure markedly different from the rest, and only three of the nine Evaluative scales have high loadings on A factor for this concept.

The Potency scales have high loadings on the Potency factor around 50% of the times. Scales like "Strong-Weak", for example, appear to have high loadings on P factor only on six concepts. It has high loadings on Activity factor on 2 ("Ideal Self"), on 6 ("Discipline"), on 10 ("Aggression"), on 17 ("Mates"), and on Evaluative factor on 3 ("Father"), 5 ("Family"), 9 ("Prison Officers"), 11 ("Love"), 14 ("Sex"), 16 ("Borstal Training"), 19 ("Work") and 20 ("Life Outside").

None of the Activity scales appears consistently on the Activity factor across the twenty concepts. For example, the scale "Active-Passive" has a high loading on the Activity factor on only five concepts. On nine concepts it has a high loading on Potency factor and on six concepts it has a high loading on the Evaluative factors.

The/

The results have also shown that the use of overall factor loadings of scales and overall correlation between scales can present a totally false picture of the inter-relationship between scales. It has been demonstrated that the correlation between two scales having high loadings on the same factor can still vary from concept to concept (also shown by Presley 1969). Moreover, since the lack of agreement between the factor structure of scales as claimed by Osgood and the present finding may also be due to a third factor, namely, the subjects, the interaction, it seems likely, tends to be between scales, concepts and subjects, and all these factors should be taken into account in the analysis of the Semantic Differential data.

The concept-scale interaction illustrated above not only invalidates the theoretical assumption of the Semantic Differential, but also lands it in considerable practical difficulties. As Osgood himself puts it:

"In the last analysis, it may prove necessary to construct separate means or measuring instruments for each class of concepts being judged, but for theoretical and practical reasons, we hope that this will not be the case." (Osgood et al 1957 p.188).

However, a concept by concept analysis or separate Semantic Differential format for separate groups of concepts does not overcome the problem of concept scale interaction. It will be inappropriate to compare two concepts which have different factor structures. Furthermore, as Warr & Knapper (1968) have suggested, by restricting the number of concepts one can reduce the amount of concept-scale interaction. Marks (1965) factor-analysed groups of concepts in an attempt to reduce the concept-scale interaction. However it seems unlikely that one can altogether eliminate the concept-scale interaction, therefore, in a research design using ^{the} Semantic Differential it should be acknowledged and taken into account, even if it means the renunciation of the theory. Osgood, starting with a multidimensionality of meanings, reduces it to only three dimensions. He then uses a circular argument that a Semantic Differential should have

E P A/

E P A factors adequately and proportionately represented and that the scales thus analysed would yield E P A factors.

VI (7) Implications of the Findings

There is bound to be some concept scale interaction no matter how few concepts are used.. It is highly unlikely that the correlation between individual scales is identical for two concepts, no matter how similar. Therefore, it is highly unlikely that an all purpose Semantic Differential format can be produced that is equally applicable to all subjects. The most important implication for these results for this study is abandoning the traditional "D" method of analysis of the Semantic Differential data and search for an alternative, valid and reliable method to analyse the responses by by-passing the theoretical assumptions, and still retaining the essential core of the research, i.e. to measure the changes in perceptions and attitudes of subjects that can be ascribed to the treatment effect. It was suggested to treat the present data as scaling data, and analyse it by a more appropriate method and still retain the advantages of this highly versatile measuring technique, which is both indirect and subtle. The Repertory Grid method of analysis was considered and used to analyse the data instead of the traditional Semantic Differential method.

In the next chapter, the theory and application of the Repertory Grid technique are presented. The aim here is not to compare or contrast the two techniques, but to consider the use of a method of analysis which does not presuppose any theory regarding the factor structure and, at the same time, can be applicable to a scaled data, and takes into account the interaction of the scales, the concepts and the subjects.

CHAPTER VII

THE REPERTORY GRID TECHNIQUE.

VII (1) THE GRID METHOD

The Grid Method is an integral part of personal construct theory (Kelly 1955). The theory is based on the assumption that all men may be thought of as scientists in the sense that each is concerned with prediction and control of his environment. Each individual is seen as developing his own personal repertoire of bi-polar constructs, by means of which he structures (interprets or conceptualises) his world and seeks to anticipate events. These constructs are inter-related and organised into a system by means of which the individual codifies and gives meaning to his experience. Thus the Psychology of Personal constructs is concerned with the ways in which personal construct systems can be analysed and described and the ways in which they develop and change. In terms of this framework, assessment and analysis of an individual personality is his view of the world, and his own personal construct system can be made.

The Semantic Differential technique is a part of Osgood's theory of 'meaning', based on the learning theory framework in which a word becomes a stimulus which, in a given situation, regularly and reliably produces a predictable pattern of behaviour. 'Meaning' is defined within the precast of three dimensions which can be compared and contrasted with other words for one subject, or with the same words from different subjects

VII (2) GRID METHOD AND SEMANTIC DIFFERENTIAL : Similarities and Differences

It seems probable that the perceived similarity of Grid and Semantic Differential arises from the fact that both are techniques rather than standard - form static tests, and both are concerned with the inter-weave of concepts (elements) and scales (constructs). The Semantic Differential can be seen as a logical conclusion of orthodox test construction/

construction procedures and it embodies no more than the rationale implicit in current ideas on the structure of rating scales and inference from the factor analytic method. It does not relate to specifically any systematic theory and in some major respects it contradicts the theory which Osgood proposed as its basis. The paralleling of the notion of excitatory and inhibitory reactions with the semantic idea of bi-polar opposites seems arbitrary. On a learning theory basis, one would expect the organism to wind up softness versus non softness. However, it is not clear from Osgood's S-R account of how meaning is acquired which would make an inhibitory response to say 'soft' produce the concept of 'hard'.

In the personal construct theory, the distinction between 'elements' and 'constructs' is an empirical one, indicating merely the level of superordinacy at which two constructs are being considered. Construct theory accepts that each individual erects his own personal constructs (in terms of both verbal and operating discriminations). Osgood concedes that meaning is 'personal' as well as multi-dimensional, yet when the measure is finally constructed the individual's personal meanings are only recognised within publicly designated dimensions of Evaluation, Potency and Activity.

By contrast, Repertory Grid technique is logically related to personal construct theory. For example, the theory argues that psychological space is multi-dimensional and the Repertory Grid accepts this, in that all constructs are compared with all other constructs and they are not matched against any universal axes.

The central characteristic of the Semantic Differential is its utilisation of factor analytic variance. These factors are assumed to be orthogonal dimensions, thought to be independent, and designed to give maximum dispersion of concepts in the Semantic space so ordered. In the Grid technique, no prior assumption about orthogonal dimensions is made. In any particular grid, all possible pairs of constructs can be correlated for/

for a given individual, and no assumption about independence of constructs of subgroups of scales, as loaded on major factor, need be made.

The Semantic Differential and the Grid methods, despite their theoretical differences, are similar in many respects. Both techniques are measuring instruments, primarily concerned with the multi-dimensionality of personal meaning. Both are concerned with the inter-relationship of concept (elements) and scales (constructs). Both methods rely on a factor analytic approach to derive the principal components.

VII(2)(i) Methods of Analysis : The Common Ground

There is little direct experimental comparison of Grid and Semantic Differential techniques in the literature. Fransella (1965) used a number of forms of both Repertory Grid and Semantic Differential in studying stutterers. She analysed the Semantic Differential down to the level of factoring results for the individual subject. She found it difficult to locate the traditional three dimensions. However, she showed that it was possible to factor analyse the Semantic Differential of an individual, thereby, in effect, converting it into a grid. Slater (1965) developed computer programmes for Principal Component Analysis for grid, allowing for entries in the form of seven point scales, and therefore, readily accepting Semantic Differential material. In this study, Slater's method of analysis (1972, 1974) was applied in the analysis of the data. However, by doing so, the whole procedure on which Semantic Differential is based is implicitly rejected, in that a form of cluster analysis on an idiographic basis (essentially the form of the grid) has been accepted. A grid, therefore, may be seen as carrying out, on each individual subject, something like the procedure which Osgood applied to large populations in his attempt to derive normative axes of meaning. Grid results can either be analysed individually, or pooled. The Grid method/

method can be cast in such a form as to give all the information that might be derived from the Semantic Differential and additional information which is not obtainable from the normal use of the Semantic Differential method. In grid terms, the Semantic Differential is concerned with the placement of certain specific elements in relation to a number of constructs. Grid method allows the examination of the element in the construct space, but, in addition, allows examination of the relationships between constructs in the element space.

Slater (1965) illustrated how the microcosm (the private world of one individual) and its variations, can be studied and analysed by looking into the relationship between elements and constructs. The technique goes further than the Kelly's (1955) method which classifies the grid into a dichotomous classification, i.e. elements that are characterised by the constructs, and those that are not, like "interesting" vs "dull", etc. Slater suggested the relationship of each element with each construct should be looked into to obtain a clear and more informative picture of the "microcosm" of an individual. He illustrated how the dispersion of elements in the construct-space, and dispersion of constructs in the element-space, using their loadings on various components, could be used.

Slater (1969) asserts that, though Semantic Differential and Repertory Grid are considered as theoretically diverse methods, and, once their theoretical origins are overlooked, there are striking similarities between the data obtained by both methods. In addition to the scaling and ranking methods, the two approaches use different terms for the same notions, e.g. concepts and elements and scales and constructs. Elements and constructs can be supplied by the experiments in the Grid method as it is done in the Semantic Differential technique.

VII (3) RELIABILITY OF THE GRID METHOD

Fransella & Bannister (1977) argue that the traditional concept of reliability (the tendency of a test to produce exactly the same results for the same subject at different times) cannot be applied to the Grid method, since personal constructs and constantly changing systems are used to assess predictable stability and predictable change (Mair 1964, 1966). Moreover, there is no such thing as the Grid, and reliability of a grid has to be assessed in the context in which it is used. The reliability of a grid can be assessed by examining various measures derived from the grid data.

VII(3)(i) Intensity

This is a global measure of the amount of correlation or relationship between constructs in a grid, so that a high intensity score indicates that most of the constructs are seen as implying each other and are not used independently. Intensity correlates very highly with other global measures of structure such as the amount of variance accounted for by the first Principal Component Factor. Intensity tends to have low reliability from test to retest. Bannister (1962) and Honess (1977) report the test-retest correlation of .35 for a measure of Intensity in the rank order grid. Intensity score tends to increase when a person completes a second grid a short time after the first. An underlying cognitive process linking the constructs is assessed in the actual completion of the grid. (Bannister, Fransella & Agnew 1971). Intensity tends to vary with different test conditions and different groups of subjects. Although Intensity, on the one hand, is said to be valid (in that it predictably relates to characteristics of subjects and situations) it has low reliability over time (Fransella & Bannister 1977).

VII(3)(ii) Construct Relationship /

VII(3)(ii) Construct Relationship

The grid data also yields a matrix of measures of inter-relationships between constructs. One way to measure the pattern of construct relationships is the index of factual similarity calculated by rank ordering the relationship scores of each matrix from highest positive through zero down to the highest negative and then running a Spearman's rho between the two. This measure has been used in various studies on repeated grids, using either the same or different elements with the same constructs, reporting correlations within the range of .60 to .80.

Lansdown (1975) found a correlation of $-.35$ ($p < .01$) between immediate test-retest at a retest interval of more than eight days. In a study by Watson (et al 1976) the overall similarity of element placements between pairs of grids averaged .74 with the range of 1.00 for individual subjects. Fransella & Bannister (1977 p.85) point out that the stability of construct relationships may be related to the test conditions, subjects, elements and particular constructs. They also report that certain constructs, e.g. "Good - Bad" are more stable than others, e.g. "Usual - Unusual".

VII(3)(iii) Sources of Variance

A common finding with grids is that different individuals will show widely varying degrees of stability when they are given repeated grids. Different clinical populations may have very different reliabilities (Bannister & Fransella 1966). Reliability itself can be used as a measure of populations rather than as an assessment of the test. Similarly, different elements and different constructs may yield different test-retest conditions.

Bannister (1960, 1962) and Bannister & Fransella (1966) argued that, in a stable system of construing, the relationships between constructs/

constructs remain the same when one set of elements is replaced by another. He found that thought disordered schizophrenics scored significantly less than the other groups with which they were compared. Slater (1972) studied experimental methods measuring under different conditions, e.g. using different choices of elements and different scaling methods. He suggests that when two grids refer to the same elements as well as the same constructs obtained from the same respondent on two different occasions the two grids can be aligned in rows and columns. Then, subtracting one from the other, the mean grid is calculated from each construct in each grid and the grids are converted into tables of deviations from the construct means. The subtraction produces a grid of differential changes. Slater (1972) describes a computer programme code named DELTA that analyses the grid of differential changes. The results include correlations between the aligned constructs and their variation and co-variation is accumulated to measure the general degree of correlation between the two grids. This coefficient describes the test-retest reliability or element consistency of the grids, in contrast to their construct consistency or coefficient of convergence used by Bannister. Though there is a number of different ways in which the reliability coefficient of a grid can be assessed, the reliability of a grid is meaningful only in the context of its use. As Fransella & Bannister (1977) put it:

"It seems sensible, therefore, to regard reliability as the name of an area of enquiring into the way in which people maintain or alter their construing, and to estimate the value of the grid, not in terms of whether it has a 'high' or 'low' reliability, but whether or not it is an instrument which enables us, effectively, to inquire into precisely this problem." (p.91).

VII(4) VALIDITY OF THE GRID METHOD

Since a grid is not a test, it has no specific contents,
therefore/

therefore its validity can only be talked about in the sense that we can question whether or not it will effectively reveal patterns and relationships in certain kinds of data. Analyses of grids have revealed a pattern of relationships between the constructs by revealing a pattern in the way in which the person has ranked his elements. Thus, a grid has an intrinsic validity. It should be reiterated here that a grid is essentially a format for data and that while it is reasonable to question the validity of a particular grid for a construct to yield particular information, it is not sensible to dispute the validity of The Grid as such. If a grid had no predictive value, then we would look for flaws in that format. The validity of a grid depends largely on the way elements, constructs are elicited or supplied, and what kind of format we ask the subject to work in (rank order, rating, dichotomous allotment), what overall format is used (Multi-celled grid, implication grids, laddering and so on). What aspects of structure or content in the construing system are we studying and what kinds of analysis are we proposing to perform (question analysis or measure of structure etc.)?

The usefulness of grids has been demonstrated in a number of different studies, particularly in areas of psychopathology. Much of its use has been with individual patients as a way of trying to increase the psychologist's understanding of the ways in which the individual views his work. Fransella & Adams (1965) report that a man who has committed a number of acts of arson did not, in fact, see himself as an 'arsonist' in terms of his own views and purposes. Such a finding suggests why the man would not necessarily be subject to remorse, or consider himself in need of treatment. Rowe (1971) similarly showed a depressed woman was unlikely to improve under treatment in terms of her view of the nature of her depression. Ryle & Breen (1972) found sharp differences in patterns of construing between people differentially characterised/

characterised on the Middlesex Hospital Questionnaire. Changes in construing in a marital therapy setting have been studied by Ryle & Lipshitz (1975). They studied a married couple where the grid elements were the relationship of husband to wife and wife to husband rated in terms of eighteen 'behaviour' and fifteen 'feeling' constructs, and with progressive changes shown on the eleven occasions of testing which preceded marital therapy sessions.

A further study of a married couple and their relationship, particularly in sexual terms, is presented by Bannister & Bott (1974). Smail (1972) used the grid as a measure of empathy in small therapy groups and showed that there were positive relationships between the grid empathy measures and the therapist's and patient's ratings. Caplan (1975) showed that repeated grid measures of self-esteem and patterns of identification with parents were significantly associated with aspects of mutual interaction within the group. Studying social relationships, Dick (1973) found that friendship pairs did possess construct systems which are more similar to each other than those of non-friendship pairs and that subjects tended to overestimate the similarities between themselves and their chosen friends.

Studying the relationship between linguistic meanings and personal constructs, Mair (1966) found that in the subjects' grids, when averaged, the relationship between the verbal labels used in terms of dictionary meanings were closely associated, this is, synonyms were highly positively related, antonyms were highly negatively related. However, in case of individual grids, the relationships between constructs were not precisely those which a dictionary would have predicted.

This finding is in line with the construct theory that a substantial part of our relationship between our constructs reflects cultural teaching, but also each of us develops idiosyncratic meanings for/

for words from our own unique experiences.

VII (5) COMPUTER ANALYSIS OF THE GRID DATA

George Kelly himself was the first to foster the idea that statistical procedures should be applied to analyse the data. In Psychology of Personal Constructs (Vol. I) Kelly (1955) outlined a non parametric method of factor analysis. The major contribution to the analysis of Grid data was made by P. Slater who, in 1964, described his method of analysing Rank Grids into their principal components. He then went on to develop methods for comparing Grids, both with the same elements and constructs and with different elements or constructs. By conceptualising a psychological space as a hypersphere, he was able to quantify the extent to which elements and constructs on a rank or rating grid interacted.

Slater (1967, 1968, 1972) developed a series of programmes that provide a very detailed analysis of grid data. For individual cases the INGRID Principal Component Analysis gives a detailed account of the relationship present in a grid. The correlation between the constructs, the distance between the elements, the loadings of both the constructs and the elements on each of the components, and the inter-relationship between constructs and elements are also given. In addition, a breakdown of the total variation present in a grid into that accounted for by each of the constructs for each of the elements is given.

DELTA (Slater 1968) applied two grids which are aligned by elements and constructs. It can be used in a situation where a grid is administered on two occasions, to examine the change over time. It can also be applied to study the differences between two grids completed by different subjects. The output of DELTA includes details of the correlation between the use of the individual constructs in each grid as against the degree of correlation between the grids as a whole. A grid of/

of differences is formed by subtracting the entries on one grid from those on the other, allowing for any general tendencies of mean change, and this grid is then subjected to a principal component analysis, similar to that obtained with the INGRID programme. The difference between this output and the INGRID output lies in the interpretation. The measures now refer to the differences between the two grids, rather than the original constructs and elements themselves, so that a correlation between construct a and b signifies not the relationship between a and b, but rather the relationship between the changes on a and those on b. Similarly, the distance between element 1 and 2 refers to the parallelism or divergence of the changes in the valuation of the two elements. The component space is a space of differences or changes.

Various programmes are also available to the M.R.C. service for analysing grids in groups. In the situation where all the grids in a group are aligned by constructs and by elements, the Series Programme can be employed to produce an analysis of variance and to form a consensus grid. The output includes, for each construct, details of the general mean, the mean for each individual grid on that construct, expressed as deviations from general mean, and the means for each element expressed as deviations from the general mean. The matrix formed by considering these latter deviations for all the constructs is the consensus grid. The total variation about the general mean is also given, broken down into that due to the individual grids, elements and grid/element interaction.

Thus, from the analysis of variance, a great deal of information about the elements, the constructs and the individual grids can be obtained. From the consensus grid, a picture of the "average" or "typical group member" can be drawn. The consensus grid can be subjected to an INGRID analysis and a detailed study of this grid produced. Furthermore, for the comparison of two groups, aligned by elements to constructs, the two consensus/

consensus grids can be compared with a DELTA programme, to obtain a detailed study of differences between the two groups. There are a number of other variations and options available to analyse and compare individual group members.

The data is the rank order of elements on constructs (both may be supplied to, or elicited from, a subject) on which principal component analysis is performed. The data is specified in two distributions, i.e. the Construct-Space (C-space) and the Element-Space (E-space). The C-space is denoted by locating the vector of co-ordinates giving the location of an element in a space with an axis for every construct. The E-space is denoted by locating the vector of co-ordinates giving the location of a construct in a space where there is an axis for every element. The principal component analysis defines the connection between the two multivariate dispersions.

The latent roots of the principal components and the amount of variation accounted for by each component are given. Factor loadings for each construct on all elements and each element of all constructs are also given. The results can be presented in diagrammatical form, component by component. One can then see the orientation of elements/constructs to the positive or negative pole of a component. Moreover, distribution of two or even three components can be represented graphically. The relationship between the axis of the elements and the constructs can be considered in terms of the angular distances between them. The angular relationships between the elements and the constructs can also be obtained in terms of correlations.

VII (6) THE SIGNIFICANCE OF DIFFERENCE BETWEEN GRIDS

Slater asserts that the reliability and significance of a grid cannot be investigated by the methods used for a battery of psychometric tests given to a group of subjects. A grid is not a psychometric test and the theory from which psychometric methods relating to reliability and significance are derived assumes that samples can be drawn at random/

random from an objectively defined population. The assumption can be set aside by nomothetic data in a table of test scores, but not by idiographic data in a grid. The statistics of tests designed for nomothetic purpose tends to give meaningless results when applied uncritically to the idiographic data in a grid. They presuppose that ways can be found for estimating the distribution of entire populations of elements and constructs in private individuals and of sampling them at random. Since these assumptions do not apply to the grid data, the significance of measures, associations, between pairs of constructs in a grid cannot be determined by standard tests. (Slater, 1969).

To determine the reliability of a test it is normally given twice, with a reasonable time interval between the two occasions, to a random sample of population from which subjects come. The correlation between the scores on the two occasions will be an unbiased estimate of the correlation in the population, provided the sample is a random one. The test will be invalid if the subjects are unrepresentative samples.

No such preliminary investigation can be carried out with a grid since an idiographic grid applied to a population of elements which cannot be defined objectively or sampled at random; a reliability and significance cannot be obtained through the traditional methods. Moreover, a grid does not serve the same purpose as a battery of tests, Its primary interest is in what it shows directly, a subject's state of mind at the time of testing. (Slater 1977) suggests "logical rather than a statistical evidence to establish the significance of the difference between two grids" because he believes that the evidence that would satisfy a usual statistical requirement is unobtainable. He proposes the null hypothesis that "a particular grid is indistinguishable from an array of random numbers". He developed a computer programme (code named GRANNY)/

GRANNY) which studies the properties of such arrays. It generates n by m arrays of random numbers and treats them as if they were grids with n constructs and m elements, and applies an abbreviated form of the principal component analysis, also used for experimental grids. The grids it generates are called 'quasis'. The programme generates up to 100 quasis at a time. The upper limits for n by m are set at 50 and 25 respectively. The results produce latent roots from largest to smallest and tests them in three different ways. Firstly, each is taken as a percentage of the total variation about the row means, secondly, each as a percentage of the residual variation after the previous roots have been subtracted and thirdly, the cumulative percentage of the total variation attributable to increasing numbers of components. For each of the three values, the range, with upper and lower limits, means and standard deviations, are given. The bias and variability can be calculated by another programme provided (INGRID 72).

The significance of difference of experimental grids can be found by comparing them with quasis of the same modes and types. If the first component accounts for an unexpectedly large amount of the variation in the grid, an experimenter may go on to see whether the second accounts for more than expected of the remainder or, alternatively, the first two together account for an unexpectedly large amount of the total variance. In either case, the appropriate mode of GRANNY output can be consulted. A variation too large to be consistent with the null hypothesis is always of some psychological interest.

Statistical argument might perhaps be applied more effectively if some way could be found for obtaining an unbiased estimate of error variance from an experimental grid. Since grids are biased by their constructs and elements, even introduction/

introduction of 'control' elements or constructs will fail to overcome the problem of bias.

Once the significance of difference between the grids is established the interpretation of the psychological meaning of the difference is left to the experimenter. The data thus provided can be studied for clusters and distances of elements and constructs and psychological meanings of these relationships can be deduced.

VII (7) SUMMARY

In this chapter the grid method is briefly described and its relevant features are highlighted. Similarities and differences between the Semantic Differential and grid methods are also discussed, and a case for applying the computer programme for the grid method of analysis to Semantic Differential data is presented as a more valid and more logical approach than the traditional methods of analysis. Slater (1969) put it:

"The question 'Are there any essential differences between the contents of a Repertory Grid and a Semantic Differential?' must certainly be answered 'No'. A Semantic Differential is a grid described in different terms; it is a matrix of non real numbers recording the variation in an individual's multi-dimensional meaning-space due to the interactions of a set of concepts with a set of scales, so we come back by the same door as at the outset."

CHAPTER VIII

REVISED METHODOLOGY AND PROPOSED ANALYSIS:

In view of the current literature on Semantic Differential, its theoretical limitation^s and the experiment carried out on the present sample, the traditional method of analysis of the Semantic Differential data, the D method, was abandoned. The significance of differences between two concepts, on two ratings of the same concept, is assessed by summing the scales belonging to a factor (say Evaluative) and comparing it with the summation score of (Evaluative factor on) another concept. The test-retest differences can be measured by differences between the scale or factor scores. However, as it has been demonstrated that not only the stability of scales may vary considerably across concepts and subjects, scales do not always have the same structure across two concepts. Hence comparison of two ratings or two concepts by means of summation method is inappropriate.

VIII (1) THE ADAPTATION OF THE METHOD OF ANALYSIS

The alternative method of analysis proposed is to analyse the data with the recently developed computer programmes for Repertory Grid data. In spite of the vast theoretical differences, the similarities between the Semantic Differential technique and the Grid method are striking. Both are techniques and procedures and not psychometric tests. Therefore, they do not have a specific content or a norm as such. The traditional concept of reliability does not apply to them. Both methods are scaling (rating or ranking) procedures, and their reliability depends very much on the context in which they are used. Thus, reliability found in a study will be only applicable to the concept scales, and subjects used in that particular investigation. Similarly, the variability in the concept and scale and the reliability of the contents used has to be established for each investigation.

By applying the Repertory Grid Analysis to the Semantic Differential data, one by-passes the theoretical assumptions of the Semantic Differential. Concepts (Elements) are ranked by a specific group, on a series of seven point bi-polar scales (Constructs). By means of the principal component method (on which both techniques heavily depend) the major factors are extracted, which are specific to that particular group, particular element and constructs. The number of factors to be extracted and the relationship between scales and concepts and factors are all based on the empirical finding and statistical criteria and not on a theoretical model.

The present data will now be analysed by the Grid Method and results presented and discussed in terms of differential changes between test and retest. A differential change is obtained by finding the differences between test and retest for each individual construct for each individual element and then subtracting the absolute differences from the mean difference of the Grid. The results of the analyses are carried out on the Grid of Differential Changes. These analyses include principal components for constructs as well as for Elements and inter-relation between Constructs and Elements. The results indicate the amount and direction of differential changes between the two ratings observed on different factors. The absolute positions of the ratings for first or second testing as such are disregarded.

The adapted method of analysis discussed is considered valid. (Kelly 1955: Bannister & Mair 1968: Fransella & Bannister: 1977). However, the validity of the results thus obtained has to be established. The question "To what extent can the test-retest changes be attributed to the effect of Borstal training?" must be answered before any meaningful importance can be attached to the findings.

The whole question of validity warrents separate discussion.

VIII (2) VALIDITY OF THE DESIGN

Campbell & Stanley (1963), in their classical article, discuss at length the question of validity of quasi-experimental designs - the designs in which the experimenter is unable to control all the variables under study. They discuss a number of factors that may jeopardise the validity of various experimental designs. Since the present study can be called a 'quasi-experimental' one, a critical appraisal of the design is highly desirable. Following is an account of the factors which, according to Campbell & Stanley, affect the validity of a quasi-experimental design. Later, in view of these factors, the validity of the design of the present study will be discussed.

Campbell & Stanley (1963) make a distinction between Internal Validity and External Validity. Internal Validity is concerned with showing the extent to which the results of an experiment can be justifiably attributed to the parameters in question. External Validity is concerned with the extent to which the results of the experiment can be generalised to other populations, settings and treatment. Both types of validities are considered important.

VIII (2) (i) Internal Validity

In the discussion of Internal Validity Campbell & Stanley present eight different classes of extraneous variables which if not controlled will produce contaminated results. These variables are:

- a) History: specific events occurring between first and second measurement in addition to the experimental variables.
- b) Maturation: processes within the subjects operating as a function of the passage of time.
- c) Testing: the effects of taking a test upon the scores of the second testing.

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- d) Instrumentation: in which changes in the calibration of a measuring instrument or changes in the observers or scorers used may produce changes in the obtained measurements.
 - e) Statistical Regression: operating where groups have been selected on the basis of their extreme scores.
 - f) Biases: resulting in differential selection of respondents for the comparison groups.
 - g) Experimental Mortality: or differential loss of respondents from the comparison groups.
 - h) Selection-Motivation-Interaction: which in multiple group quasi-experimental designs might be mistaken for the effect of the experimental variables.

The factors jeopardising external validity or representativeness are:

- a) Reactive or Interactive Effect of Testing: in which pre-test might increase or decrease the subject's sensitivity or responsiveness to the experimental variable. Thus making the results obtained from a pretested group unrepresentative of the population in general.
- b) The Interaction Effects of Selection Biases: and the experimental variables.
- c) Reactive Effects of Experimental Arrangements: which would preclude generalisation about the effect of experimental variables upon persons being exposed to it in non-experimental settings.
- d) Multiple Treatment Interference: is likely to occur whenever multiple treatments are applied to the same respondents because the effects of prior treatments are not erasable.

Campbell & Stanley critically discuss ten different experimental designs and discuss their relative weaknesses and strengths in the light of their own criteria for internal and external validity. The

design of the present study follows the 'ONE-GROUP PRETEST POST-TEST DESIGN', in which a group of delinquents sentenced to Borstal Training were asked to rate various concepts of Semantic Differential scales on two different occasions; firstly, before the commencement of Borstal Training (O1), and secondly, just before their discharge from the Borstal. (O2). It was hypothesized that the changes between the two temporally spaced ratings would be attributable to the experimental variables involved in Borstal Training (X).

Taking the first of the jeopardizing variables, History does appear to be a confounding factor. It becomes a more plausible rival explanation of change the longer the time lapse between first and second testing. The time interval between the two ratings varied from 8 months to 18 months so many factors or events will have influenced the changes between O1 and O2. A particular event in the family, the reaction of parents and family to the sentence, attitude of the staff, particular relationships and friendships established during the stay in the Borstal, and any particular type of treatment or training could have effected the results. On the other hand, it could also be argued that once an offender has been sentenced to Borstal training, all events taking place within the time before his release are [all] aspects of the period spent in the Borstal. Therefore, history in this context is less confounding a variable than it would have been had differences between individuals not been studied. As the original hypothesis implies that Borstal experiences modify the meaning systems, it could be argued that individual events would have been modified by taking place within the confines of a Borstal.

The second rival variable is Maturation. The term covers all growth processes which evolve with the passage of time. As between O1 and O2 the subjects have grown older, the obtained differences may reflect predominantly maturation processes, rather than the effect of

Borstal training, and such an effect may be the cumulative effect of learning processes and environmental pressure, which would be operating even if no training had taken place.

The extent to which the changes can be attributed to Borstal training and not to maturation could have been determined by having a control group which is comparable to the experimental group in all important respects but not subjected to Borstal training. In practice it was not possible to have a control group, for the experimental group was a highly selected group, ie. delinquents who are considered to have serious emotional problems requiring psychiatric supervision.

Strictly speaking a suitable control group, who were subjected to a different regime or no treatment was unobtainable. The variations to be studied in the changes of ratings in different subgroups, goes a long way to overcome the factor of maturation. If little or no variations were to be observed in the different subgroups one can treat this as strong evidence for the rival hypothesis. If on the other hand the different groups vary in their changes then maturation processes alone cannot be said to be at work.

The third confounding variable is the effect of testing. In this study the choice of the Semantic Differential overcomes this difficulty as it is an indirect method rating. The time lapse between testings was minimally 8 months. The boys in the sample did not know that they were to be retested. It is unlikely that memory and practice affected the ratings. However, it is possible that at the time of first testing, since the subjects had the whole of the Borstal training in front of them, they may have been more guarded about their ratings of some of the concepts.

At the time of the second testing, a few days before discharge, they may have been more frank and open about their ratings of the same concepts. The two modes of response may have contributed to the

the overall changes. Still, others may have been less guarded at first and more guarded at the end.

The factor instrumentation is unlikely to be of importance in this study since the testing instructions and conditions were kept the same, and a standard scoring scheme was used. On both occasions testing was carried out by the same person.

The next confounding variable is the statistical regression. Any change observed in pretest and post-test could be a function of the imperfect correlation between O1 and O2, i.e. the errors of measurement and/or systematic sources of variance specific to one or another measures. Such a change could be causally related to the genuine effect of X.

In this study such a source of error does exist; however, large and significant changes are found in the results, a proportion of the value will be due to this regression effect. But appropriate statistical procedures may be used to allow for this source of error, and valid inferences may be made about the effects of Borstal training.

VIII (2) (ii) External Validity

External validity is concerned with generalisability of a treatment effect. An internally valid design demonstrates the relevance of the findings only to the experimental group, yet attempts are made to generalise by guessing and checking out the source of these generalisations in other similar situations. Complex interactions and relationships confuse attempts at generalisation. The more distant the experimental situation from the setting into which one wishes to generalise, the more doubtful the external validity will be. Campbell & Stanley discuss factors that may jeopardize the external validity of a treatment effect.

- a) Interaction of Testing and X: It is quite likely that a person's attitude and his susceptibility to persuasion are changed by testing. If a test sensitized the subject to the test material, it might through focussing of attention increase the effect of the X. This interaction affect is more likely to occur in the measurement of attitude by using direct methods. Since the method used in this study was more indirect than the commonly used attitudinal scales, the time lapse between O1 and O2 was minimally eight months and the subjects did not know about the second testing, this interaction effect of X and testing seems unlikely to be large.
- b) Interaction of Selection and X: The validity demonstrated by a study holds only for that unique population from which the experimental subjects were selected. This possibility becomes more likely, the more selected (or non-representative) the subjects are. The question as to whether the subjects in this study were randomly selected or whether they can be considered a representative sample of Borstal trainees in general, or whether the particular Borstal used in this study can be considered a 'typical' Borstal, are relevant to determine how far the changes found can be generalised to other Borstals or to delinquents in general. The sample in this study cannot be considered random. The subjects included were those allocated to the Borstal during the first year of study. The subjects were allocated to the Borstal on the basis of psychiatrists' reports which indicated severe 'psychological' or 'behaviour problems', 'emotional disturbance', 'psychopathic/aggressive behaviour', 'sexual offences', 'drug addiction', 'inadequate personalities' and the like. All cases were recommended for some degree of psychiatric oversight. In

some cases psychiatric treatment and/or psychotherapy was also suggested. All subjects were selected on the basis of requiring psychiatric intervention. The degree of psychiatric treatment received by the trainees varied from nothing to intensive individual psychotherapy from a trained dynamic psychiatrist. Whether or not a trainee received psychiatric treatment depended not only on the original psychiatric report but also on the recommendation of non-specialist staff like the governor, the prison officers and often on the trainees own request for 'psychotherapy'. The frequency and the type of treatment received depended on the psychiatrist's time and his orientation (medical, individual or group approach). Few, if any, details of the treatment process were kept. Therapy was terminated apparently on the clinical judgement of the psychiatrist. The Borstal selected for this study specialised in psychiatric treatment and in this respect it is unique.

Thus, the sample cannot be considered random or representative of Borstals in general nor can the Borstal and the important aspects of 'training' be regarded as typical Borstal training. Therefore, there exists a strong possibility that the changes between O1 and O2 would be attributable to the interaction of the highly selected sample receiving a unique mode of Borstal 'training' in an atypical institution. So, to what extent can we legitimately generalise the results to delinquency at large or Borstal training in particular? The results can be generalised only to those delinquents who are classed as 'disturbed', having 'emotional problems' or 'inadequate personalities'. Not all Borstal trainees are so described. Nevertheless, in one important respect the subjects in this

study are similar to other Borstal trainees, ie. in their delinquent acts. Some of the subgroups in this study, the 'drug abusers' for example, can be compared to drug abusers selected on the same grounds and subject to comparable institutional training. Therefore, any significant changes in the ratings of drug abusers in this study can be generalised, with due caution of course, to other drug abusers. Similarly, some generalisations can be made for the 'sex' offenders. Admittedly, generalisations regarding the changes in the 'aggressive' group cannot be made, for the group was relatively less clearly defined than the above two. This group includes delinquents who are in for committing violent offences and regarded as psychiatrically 'disturbed'. The generalisability of the results is even less valid in the case of a heterogeneous group like the 'larceny' group. By far the largest in the sample, this group has more in common with the 'average' delinquent in that his offence is mainly non-violent and against property. This type of delinquent has to have a number of severe emotional or psychological difficulties in order to be recommended for specialised training. As in this sample, the results of change in this subgroup, therefore, are the least generalised of the 4 subgroups.

Interaction of an experimental treatment with other factors can also undermine external validity. Factors discussed under internal validity can jointly interact with X and may produce results that show maturation effect on a selected sample, tested on a specific instrument, with specific combination of stimulus conditions at that time. There is also an inherent difficulty with studies of treatment effects in institutions - that, many important factors remain outside the control of the

design. The social and penal policy at the time of the second half of the study went through a somewhat dramatic change. Due to an increase in the inmate population and changes in the attitude to delinquency, the 'turn-over' in the Borstal population was increased. The average length of training was reduced and many trainees spent only the minimum six months in the Borstal. The effect of this change in 'penal' policy on the changes in the ratings is only a matter of conjecture, (apparently they would think it not as bad as they had anticipated). For this reason the variable Term was dropped from the analysis.

Another variable which was noted at first and dropped later was whether the trainee went on to the 'open' Borstal or not. Once again, due to lack of space in the Borstal in general, many trainees were transferred to 'open' Borstals, including those who under other conditions would remain in the closed Borstal until the end of the training. Since the effects of this change in policy and practice affecting Borstal trainees could not be ascertained the variables, Therapy, Term and Open/Closed were dropped from further analysis. However, the interaction of policy changes and the X can-not be denied.

VIII (3) A CRITICAL APPRAISAL OF THE DESIGN

The subjects of this study consisted of a group of 109 psychiatrically disturbed delinquent boys. The sample included drug abusers, sex offenders, aggressive behaviour disorders and larceny offenders. They were all sentenced to a period of Borstal training, to take place in an institution also providing psychiatric care. The aim of this study was to assess the degree to which Borstal experiences change the attitudes of the trainees.

The technique used in this study was Osgood's Semantic

Differential, which measures the connotative meanings of concepts.

Twenty concepts, considered in the literature to be relevant to delinquency were used. Following Osgood's recommendations a Semantic Differential form was prepared, which contained twenty bipolar, adjective scales. Each scale was subdivided into seven intervals. The subjects were asked to rate the twenty concepts on each of the twenty scales, before starting their training and again at the end of their period of training. The study comprised both the assessment of the Semantic Differential as a technique and of changes in the ratings of concepts which can be attributed to Borstal training. It was found that for this data Osgood's assumptions about the Semantic Differential did not hold. An alternative method of analysing the data, the grid technique, was used instead. The question of reliability of the scaling procedure used is examined and found to be acceptable. The validity of the procedures is also considered reasonably established.

It was not found possible in this study to establish the internal and external validity of the hypothesis that the changes found can be wholly attributed to a period of Borstal training. It may well be that factors other than Borstal training contributed to the results. The technique of measurement itself has been shown to be based on erroneous assumption. A study using the Semantic Differential format, needs a very thorough investigation into the selection of concepts and scales that conform to the tri-dimensional concept of meaning. When a standard form of Semantic Differential scales is used, then the range of concepts to be measured becomes restricted. Even so, the uniformity of the stability of the scales has to be ensured. Such an investigation will need an unrealistically prolonged period of preparation before the study could be undertaken. Moreover, such results, were they to be obtained, would be artifidally restricted to only three dimensions.

The method of analysis used in this study, ie the grid method, has the same advantages as the Semantic Differential rating technique. It is indirect, minimally susceptible to memory and practice effects, and does not require a high level of verbal skills. To overcome the drawbacks of the technique it is proposed that a list of elements (or concepts) and constructs (or scales) should be elicited through interviews, discussions and formal testing from a representative sample of delinquents and a Semantic Differential format or a rating grid is then prepared to be used in the study. The sample and the subgroups may be thought of as loosely defined. In the field of delinquency the classification of subgroups presents a major problem, which has not been adequately resolved. There is a considerable overlap of delinquent acts within any classifying system. The classification of delinquents according to offence is a purely arbitrary way of defining their behaviour. It is a routine practice within the penal system that sex offenders and drug offenders are sentenced to Borstal training offering psychiatric help. The assignment of Larceny and Aggressive delinquents to similar placements is much more arbitrary and depends upon the clinical assessment of the psychiatrist. The reliability of such assessments cannot be established.

The use of formal psychodiagnostic testing was considered and rejected on the grounds that no such procedures are available which would provide a reliable measure of type and degree of psychiatric disturbance. A major limiting aspect of the design is the absence of a control group. The absence of a control group is inevitable. A control group of 'disturbed' delinquents not receiving Borstal training would have been ideal but unobtainable. A control group, having delinquents transferred to another Borstal, would have been a substitute.

Thus the study would be assessing changes in two different delinquent populations in two different Borstals. It would have been

difficult to ascertain whether the differences between the groups was due to the differences between groups or Borstals or both. The concept of randomisation is closely linked with having control groups in experimentation. Since all Borstals are selective and it is not possible to allocate a delinquent randomly to one or the other Borstal. The Borstal in this study is unique in terms of training and experience it offers. In a study of non-psychiatrically ill delinquent population, the comparison between two similar groups of delinquents randomly allocated to two similar types of Borstals would be a possibility. In this study it was elected to have a well defined population and specialised training programme.

In this study, the group was subdivided according to intelligence, (Above Average, Average and Below Average), offence (Larceny, Drugs, Aggression and Sex) and also Term (Long, Medium and Short) also therapy (whether received or not), and Freedom (whether they were re-allocated to open Borstal or not).

It was intended that within each subgroup, one level would be treated as a control against another level. At the end of the second testing Term, Therapy and Freedom were dropped from further analysis because of an abrupt change in the social and penal policy at that time, leaving only Intelligence and Offence as categories for valid comparisons. The change in policy led to a speedier discharge and a faster turnover in the Borstal population, and also affected the pattern of reward and punishment.

The validity of findings in such a study can be improved by follow-up of subjects over a long period after release. However, it was not practical nor possible. Firstly, the delinquents sent to the Borstal in this study came from all over the country. Secondly, follow-up studies usually indicate not the delinquent's antisocial behaviour

following release, but the fact that he is caught again. The limitations of the follow-up method have been discussed in Chapter I.

This criticism of the design of the study does not necessarily invalidate the results. Any research involving institutions, legal or other, is beset with various limitations. The Research Project can be imposed upon the institution from an outsider, or it can be related to an actual problem or issue pertaining to the institution. The first type of Research Projects get results that may be experimentally rigorous but not applicable to the problems within the institution and the latter get results that may be highly applicable to the problem of the institution, but probably not 'valid' because of lack of rigorous research.

An alternative model [] that research ~~may be a joint venture~~ involving the staff of the institution and specialists in research methodology is suggested by Campbell & Stanley (1963 pp 191). Results should then be relevant and valid. The present study does achieve this compromise to some extent. On strict scientific criteria, it may not be rated the same as the laboratory experiment, but the approach does point to a means of examining 'change'. The results may not answer all questions but it may point to an area of further research as Campbell & Stanley put it (pp 189).

'We will learn how far we can generalise an internally valid finding only piece by piece through trial and error of generalisation efforts. But these generalisation efforts will succeed more often if in the initial experiment we have demonstrated the phenomenon over a wide variety of conditions.'

CHAPTER IXRESULTS (A)RESPONSE STYLES.

In this section an analysis of the response styles of the subject is presented. The mode of responding, particularly the Extreme response style, is studied in relation to three variables; Intelligence level, Offence group and Concept class.

IX (1) THE VARIABLES

The subjects were divided into subgroups according to the variables, in the following manner.

IX (1) (i) Intelligence Level

The whole sample was first subdivided into three groups according to the Intelligence level (See Chapter V).

- I Above Average
- II Average
- III Below Average.

IX (1) (ii) Offence Group

Each Intelligence level was further subdivided into four offence groups (See Chapter V)

- a. Larceny
- b. Drugs
- c. Aggressive
- d. Sex

IX (1) (iii) Concept Class

The twenty concepts used in the study were divided into four groups of five concepts each (See Chapter VI)

- a. Personal Concepts - Self
 - Ideal Self
 - Father
 - Mother
 - Family
- b. Emotional Concepts
 - Love
 - Excitement,
 - Sex
 - Aggression
 - Guilt Feelings
- c. Social Concepts
 - Prison Officers
 - Mates
 - Other People
 - Work
 - Life Outside
- d. Delinquency Concept
 - The Police
 - Discipline
 - The Law
 - My Offence
 - Borstal Training

IX (2) METHOD

The responses of five consecutive subjects were taken for each of the three levels of intelligence within each of the four Offence groups. Thus, in all, responses of 60 subjects were taken into account for the analysis of scale-checking styles.

The seven Semantic Differential scale points were grouped into three categories in the following manner:

Extreme (E)	included responses 1 and 7
Intermediate (I)	" " 2, 3, 5 & 6
Neutral (N)	consisted of response 4.

The scale-checking styles of the above groups were studied for each group of concepts separately by counting the number of responses in each category for all concepts in the same class. For example, response categories on Personal Concepts include responses of the five Personal Concepts, Myself, Ideal Self, Father, Mother and Family.

IX (3) ANALYSIS

For each subgroup, means and standard deviations of the three response categories were calculated, for each of the four groups of concepts and presented in Tables. The significance of the differences between the variables were tested in the following manner.

- a) In the first instance, the Extreme (E), Intermediate (I) and Neutral (N) response categories were studied separately, for each Intelligence, Offence and Concept group by a 3 x 4 x 4 model of Analysis of variance with interaction.
- b) The significance of the difference between Intelligences and Offence groups on each of the four groups of Concepts was studied by t - test.
- c) Two specific hypotheses were tested to study (i) the relationship of Extreme responses and the level of intelligence and (ii) the correlation/

TABLE 9.1
Mean Frequencies
and Standard Deviations of Extreme (E), Intermediate (I) and Neutral (N) categories of Four different Offence Groups on each of four different groups of concepts.

OFFENCE GROUPS		INTELLIGENCE GROUP I											
		PERSONAL			EMOTIONAL			CONCEPTS			SOCIAL		
		E	I	N	E	I	N	E	I	N	E	I	N
LARCENY													
Mean	17.20	57.54	25.40	16.40	55.00	28.60	10.20	56.20	33.60	11.40	55.80	32.80	32.80
Standard Deviation	6.30	7.41	5.81	9.63	7.78	5.68	4.44	9.15	8.79	5.41	8.21	3.11	3.11
DRUGS													
Mean	27.60	45.20	27.20	45.20	14.80	40.00	32.20	27.60	40.20	30.40	28.00	41.60	41.60
Standard Deviation	2.07	11.26	10.71	13.99	9.88	18.80	11.58	7.83	14.04	14.48	10.48	19.76	19.76
AGGRESSIVE													
Mean	46.40	33.00	20.60	43.00	33.40	23.60	34.60	40.60	24.80	47.00	27.20	25.80	25.80
Standard Deviation	10.92	9.28	6.66	11.64	10.09	5.03	4.56	4.80	6.98	12.51	10.87	6.69	6.69
SEX													
Mean	35.40	43.40	21.20	36.40	29.20	34.40	15.60	45.40	39.00	24.80	39.20	36.00	36.00
Standard Deviation	10.24	9.15	7.12	17.29	4.82	15.06	11.46	15.03	12.39	9.83	13.81	7.91	7.91
TOTALS													
Mean	31.70	44.79	23.60	35.25	33.10	31.65	23.15	42.45	34.40	28.27	37.55	34.05	34.05
Standard Deviation	13.70	10.30	8.62	19.66	16.13	13.22	13.28	12.43	12.35	16.17	14.87	14.22	14.22

TABLE 9.1 (Contd.)
Mean Frequencies
and Standard Deviations of Extreme (E), Intermediate (I) and Neutral (N) categories of Four different Offence Groups on each of four different groups of concepts.

<u>OFFENCE GROUPS</u>		<u>INTELLIGENCE GROUP II</u>											
		<u>PERSONAL</u>			<u>EMOTIONAL</u>			<u>SOCIAL</u>			<u>DELINQUENCY</u>		
		E	I	N	E	I	N	E	I	N	E	I	N
<u>LARCENY</u>													
Mean		55.60	30.40	14.00	50.80	22.80	26.40	47.20	32.80	20.00	50.80	26.80	22.40
Standard Deviation		10.81	9.03	7.31	21.65	14.19	11.52	18.10	15.64	9.70	10.40	7.20	9.84
<u>DRUGS</u>													
Mean		28.00	42.20	29.80	19.00	37.80	43.20	28.40	35.80	35.80	28.40	33.00	38.60
Standard Deviation		7.87	10.28	11.39	5.48	9.71	10.03	14.15	10.52	2.90	4.72	3.87	10.45
<u>AGGRESSIVE</u>													
Mean		15.00	70.60	10.40	19.60	52.00	28.40	9.40	68.20	22.40	26.20	49.80	24.00
Standard Deviation		5.57	3.61	3.29	15.85	12.63	14.33	2.88	2.83	10.53	4.27	11.96	8.28
<u>SEX</u>													
Mean		56.00	10.40	33.60	41.60	8.40	50.00	45.00	7.00	48.00	52.00	14.00	34.00
Standard Deviation		12.10	3.05	9.66	8.53	6.19	8.94	17.55	4.27	15.62	13.47	4.92	4.42
<u>TOTALS</u>													
Mean		38.65	38.40	21.95	32.75	30.25	37.00	32.50	35.95	31.55	39.35	30.90	29.75
Standard Deviation		20.27	25.30	12.71	19.36	19.54	14.31	21.02	21.02	15.43	15.41	17.80	11.51

TABLE 9.1 (Contd.)
Mean Frequencies
and Standard Deviations of Extreme (E), Intermediate (I) and Neutral (N) categories of Four different Offence Groups on each of four different groups of concepts.

<u>OFFENCE GROUPS</u>			<u>INTELLIGENCE GROUP III</u>											
			<u>PERSONAL</u>			<u>EMOTIONAL</u>			<u>SOCIAL</u>			<u>DELINQUENCY</u>		
			E	I	N	E	I	N	E	I	N	E	I	N
<u>LARCENY</u>														
Mean			58.20	24.40	17.40	48.40	28.40	23.20	48.40	24.60	27.00	53.00	27.60	19.40
Standard Deviation			10.40	7.66	4.83	4.21	7.54	6.98	10.71	7.68	6.82	5.24	6.47	5.87
<u>DRUGS</u>														
Mean			26.00	55.20	18.80	24.00	45.80	30.20	28.20	46.80	25.00	25.20	51.40	23.40
Standard Deviation			9.92	3.77	9.98	10.16	15.63	13.95	13.61	15.75	14.93	12.64	12.10	14.50
<u>AGGRESSIVE</u>														
Mean			37.60	39.00	23.40	30.40	40.20	29.40	33.40	39.40	27.20	31.20	37.60	31.20
Standard Deviation			8.65	3.61	5.50	6.62	5.31	7.70	10.41	4.57	7.36	3.96	18.35	6.98
<u>SEX</u>														
Mean			32.80	39.80	27.40	32.20	28.20	39.60	24.20	36.80	39.00	25.00	37.20	37.80
Standard Deviation			7.29	8.17	14.15	11.30	4.24	10.92	12.11	6.68	17.33	12.00	8.62	7.16
<u>TOTALS</u>														
Mean			38.65	39.60	21.75	33.75	35.61	30.60	33.55	36.90	29.55	33.60	38.45	27.95
Standard Deviation			14.95	12.55	9.54	12.93	11.07	11.14	11.88	12.41	11.57	14.81	14.14	13.29

correlation between Extreme and Neutral responses.

IX(4) RESULTS (i) Response Categories

In the first instance, Analysis of variance with interaction was consistent on E, I and N response categories separately. The analyses were performed on Intelligence (three levels) Concept (four levels) and Offence (four levels) with five subjects in each of the Intelligence and Offence cells (See Table 9.1). The results of the analyses are as follows:

(a) Extreme (E) Ratings.

The results of the analysis of variance carried out on Extreme responses are as shown.

TABLE 9.2

Analysis of variance : 3 x 4 x 4 model with Interaction

Source	S.S.	Df.	M.S.	M.S.Ratio	Sig. level
Intelligence	2638.76	2	1319.38	11.07	<.01
Concepts	1351.13	3	450.38	3.78	<.05
Offence	4809.83	3	1603.28	13.45	<.01
Intelligence x Concepts	616.00	6	102.67	.86	N.S.
Intelligence x Offence	28492.94	6	4748.82	39.83	<.01
Concepts x Offence	1636.24	9	181.80	1.52	N.S.
Intelligence x Concepts x Offence	1444.59	18	80.24	.67	N.S.
Residual	22889.60	192	119.22		
Totals	<u>63879.09</u>	239			

The results show that different intelligence levels, concept groups and offence categories significantly differ in using the Extreme response category. Furthermore, there was a significant interaction effect of intelligence and offence on the use of Extreme response categories. The interaction between concepts groups and offence did not produce a significant effect on Extreme ratings

(b)

(b) Intermediate (I) Ratings

Analysis of variance carried out on Intermediate responses produced the following results:

TABLE 9.3

Analysis of variance 3 x 4 x 3 model with interaction

Source	S.S.	Df.	M.S.	M.S.Ratio	Sig. level
Intelligence	1222.90	2	614.95	7.15	<.001
Concepts	2243.00	3	747.67	8.70	<.001
Offence	8933.10	3	2977.70	34.66	<.001
Intelligence x Concepts	2015.30	6	335.83	3.90	<.001
Intelligence x Offence	33138.50	6	5523.08	64.28	<.001
Concept x Offence	1668.57	9	185.39	2.15	<.05
Intelligence x Concepts x Offence	1105.34	18	61.40	.71	N.S.
Residual	16496.00	192	85.92		
TOTAL	66822.71	239			

The above results show that all the three factors produce significant effect on the Intermediate responses. All interactions, except between Intelligence, Concepts and Offence, produce significant effect on the Intermediate category.

(c) Neutral (N) Ratings

The analysis of variance carried out on Neutral responses produced the following results:

TABLE 9.4

Analysis of variance 3 x 4 x 4 model with interaction

Source	S.S.	DF.	M.S.	M.S. Ratio	Sig. level
Intelligence	426.04	2	213.02	1.84	N.S.
Concepts	4271.48	3	1423.83	12.30	<.01
Offence	7329.30	3	2443.10	21.10	<.01
Intelligence x Concepts	665.97	6	110.83	.96	N.S.
Intelligence x Offence	624.89	6	104.15	.90	N.S.
Concepts x Offence	501.97	9	55.77	.48	N.S.
Intelligence x Concepts x Offence	3963.89	18	220.22	1.90	<.05
Residual	22231.00	192	115.79		
TOTAL	40014.54	239			

The above results show that factors, like concepts and offence separately, produced significant difference on the Neutral ratings. Whereas Intelligence or interaction of other factors with Intelligence did not show any significant differences.

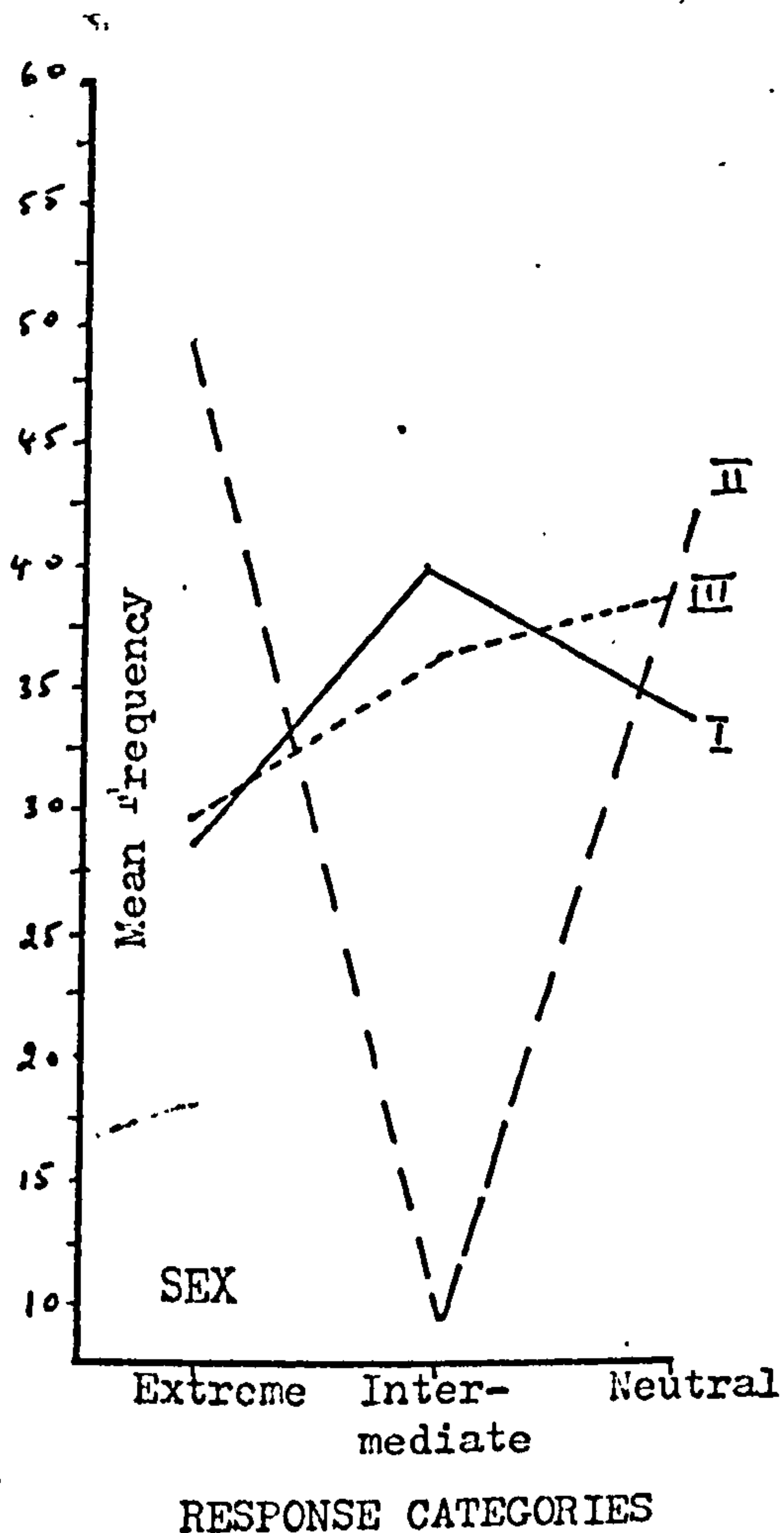
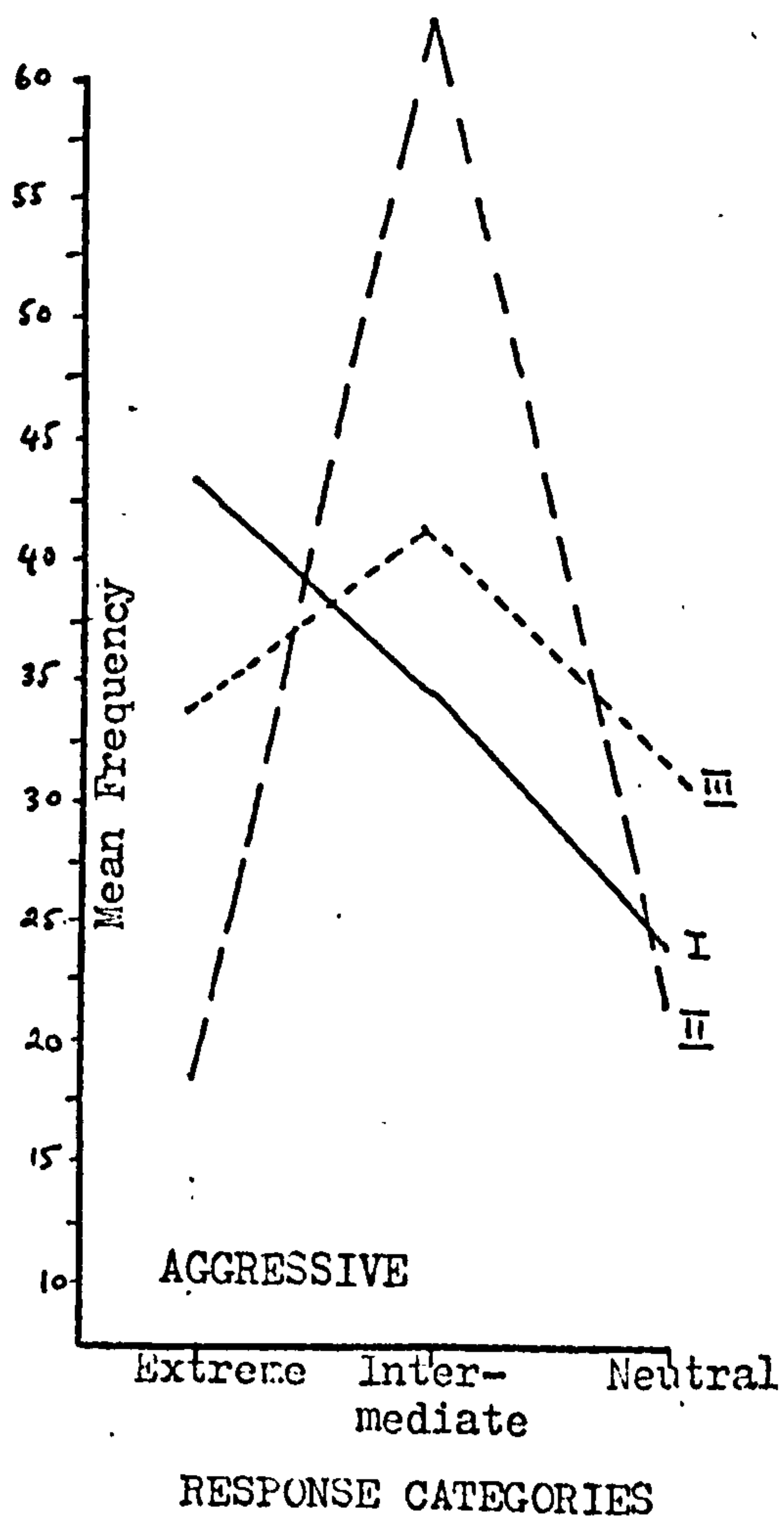
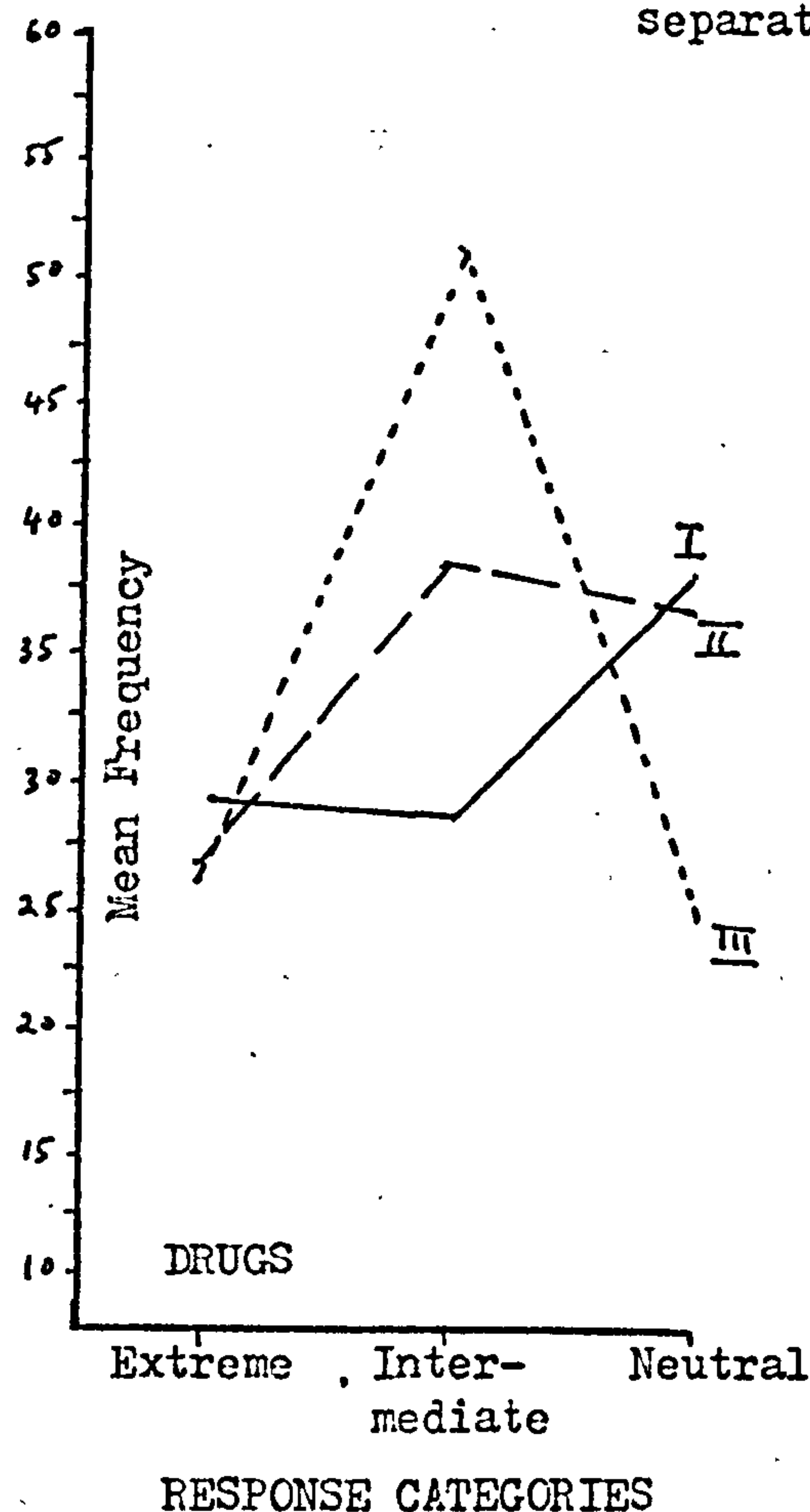
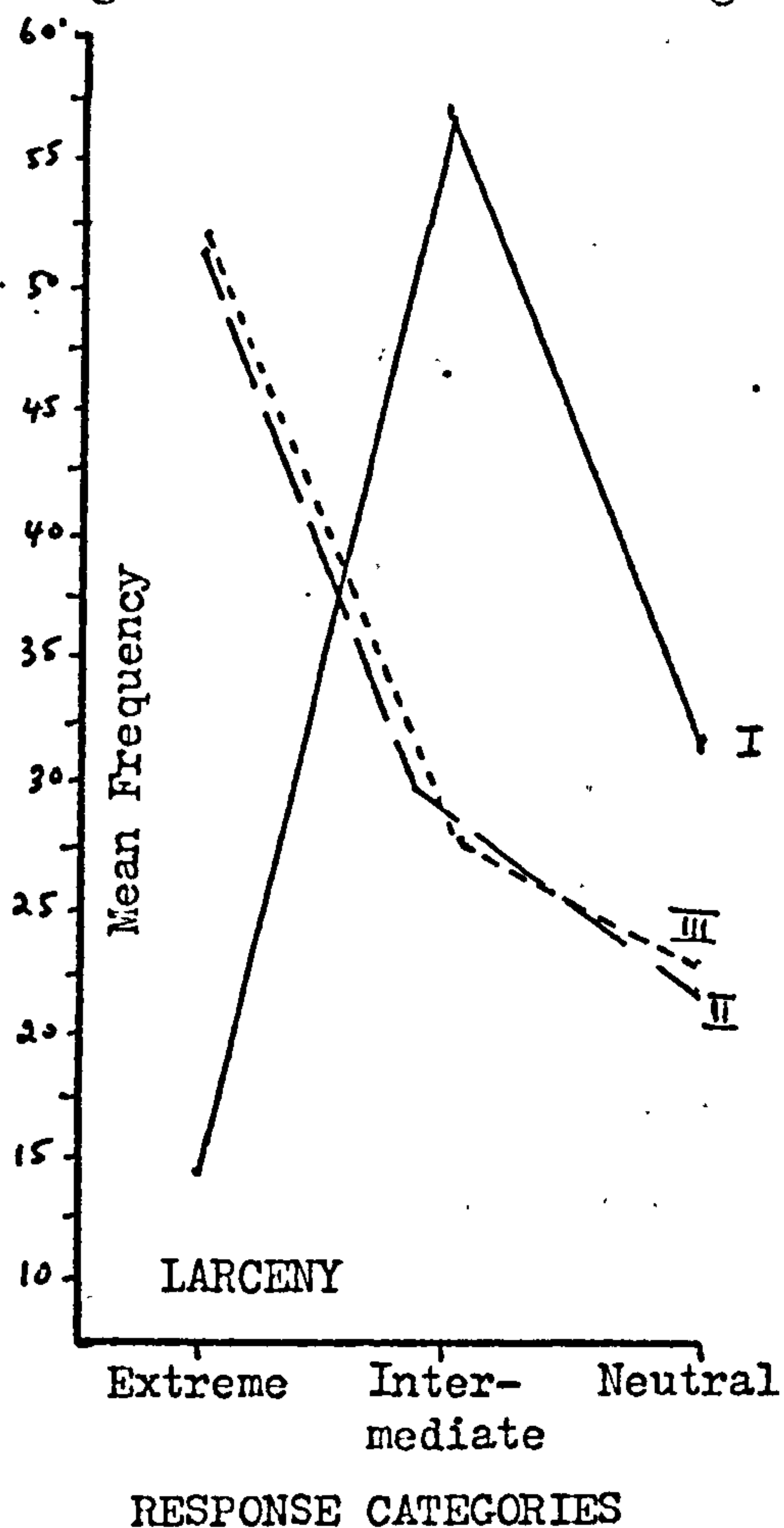
There is, however, a significant ($p < .05$) interaction among all the three factors on the Neutral ratings.

TABLE: 9.5

Means and Standard Deviation of Extreme (E), Intermediate (I) and Neutral (N) response categories for three intelligence subgroups, over all concepts. Presented for four offence groups separately.

OFFENCE GROUPS	I				II				III			
	E	I	N		E	I	N		E	I	N	
<u>LARCENY</u>												
	Mean											
Standard Deviation	13.80	56.14	31.10		51.10	28.20	20.70		52.00	26.25	21.75	
	6.45	8.14	5.85		15.24	11.57	9.59		7.66	7.34	6.13	
<u>DRUGS</u>												
	Mean											
Standard Deviation	29.00	28.90	37.25		25.95	37.20	36.85		25.85	49.80	24.35	
	10.53	9.86	15.83		8.06	8.60	8.69		11.58	11.81	13.34	
<u>AGGRESSION</u>												
	Mean											
Standard Deviation	42.75	33.55	23.70		17.55	60.15	21.30		33.15	39.05	27.80	
	9.91	8.76	6.34		7.14	7.76	9.11		7.41	6.82	6.89	
<u>SEX</u>												
	Mean											
Standard Deviation	28.05	39.30	32.65		48.65	9.95	41.40		28.55	35.50	35.95	
	12.21	10.70	10.62		12.91	4.61	9.66		10.58	6.93	12.39	
<u>TOPICS</u>												
	Mean											
Standard Deviation	28.40	39.47	31.18		35.81	26.83	30.06		34.89	37.65	27.46	
	16.31	14.40	13.32		18.65	21.80	12.81		13.17	12.56	11.82	

Mean frequencies of Extreme (E), Intermediate (I) and Neutral (N) categories for three intelligence subgroups, presented for each offence group separately.



(d) To illustrate the similarities and differences in the overall response styles, the frequency of responses in E. I. N. categories were pooled together over all concepts. Means and standard deviations of E. I. N. responses for the three intelligence levels for each offence group are presented in Table 9.5 and in Figure 9.1

Among the Larceny group, intelligence subgroup I shows a different pattern of response on all response categories from subgroups II and III. The latter are very similar to each other. In the Drug group, the three intelligence groups produced a more or less similar pattern of responding. In the Aggressive group, subgroups I and III are quite similar in their modes of responding. However, subgroup II is markedly lower in the use of E ratings. In the Sex group, the subgroup II is more likely to use extreme ratings, compared to subgroups I and III.

Little, if any, difference was observed in the use of the neutral rating. Only in the Larceny groups I and III were the means of neutral rating found to be significantly different ($t = 2.74$ Df 8 $p < .05$).

IX (4) (ii) Extreme Response Category

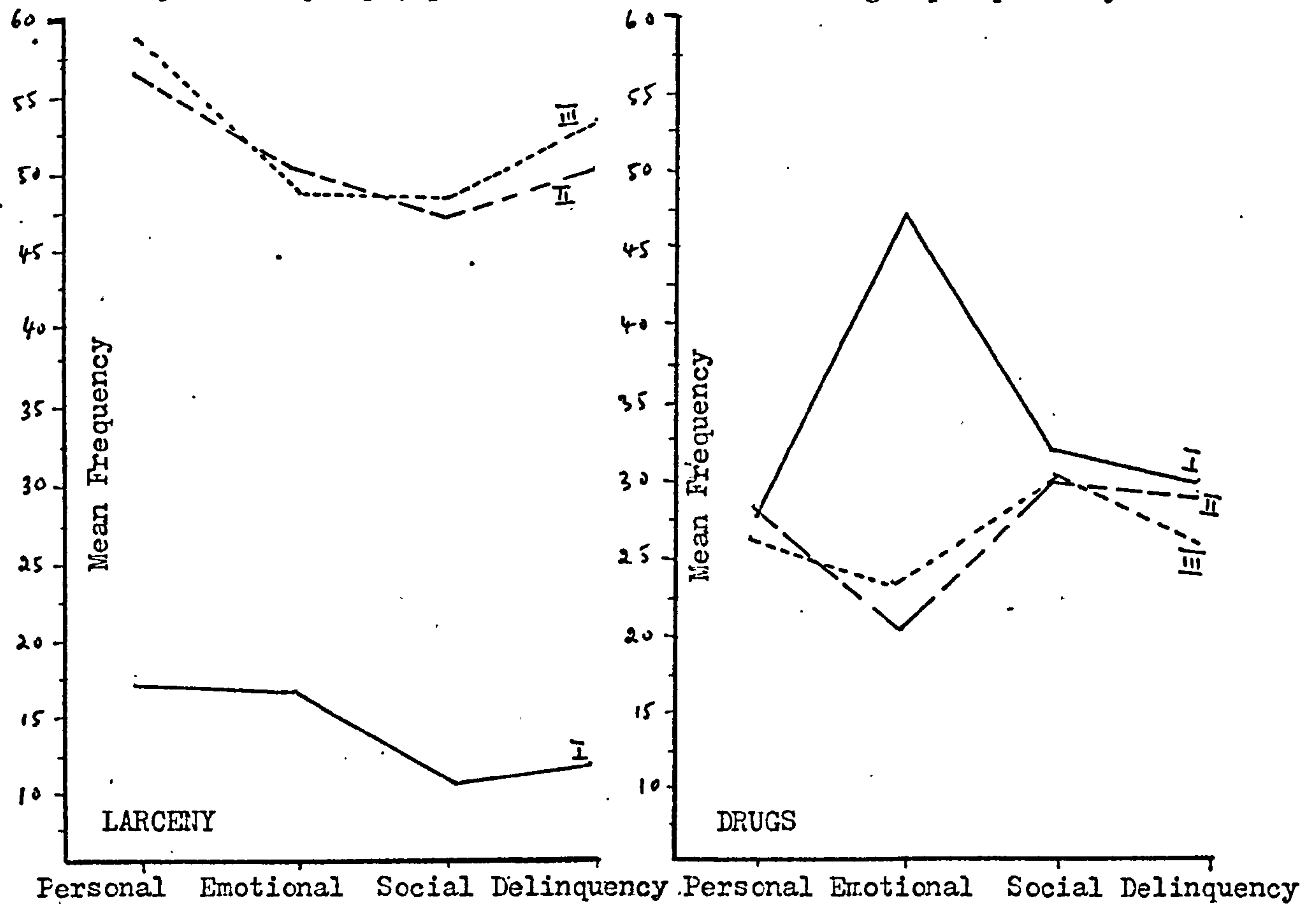
In this section, only the Extreme category was taken into account. Taking each of the offence groups separately, the significance of the difference between the mean frequencies of each of the three intelligence levels was tested by t-test. This analysis was individually carried out on each of the four classes of concepts. For mean frequencies, see Table 9.1

(a) Larceny

The results of analysis of E scores for different intelligence groups on each of the concept classes are presented in terms of the t values and the significance level in Table 9.6.

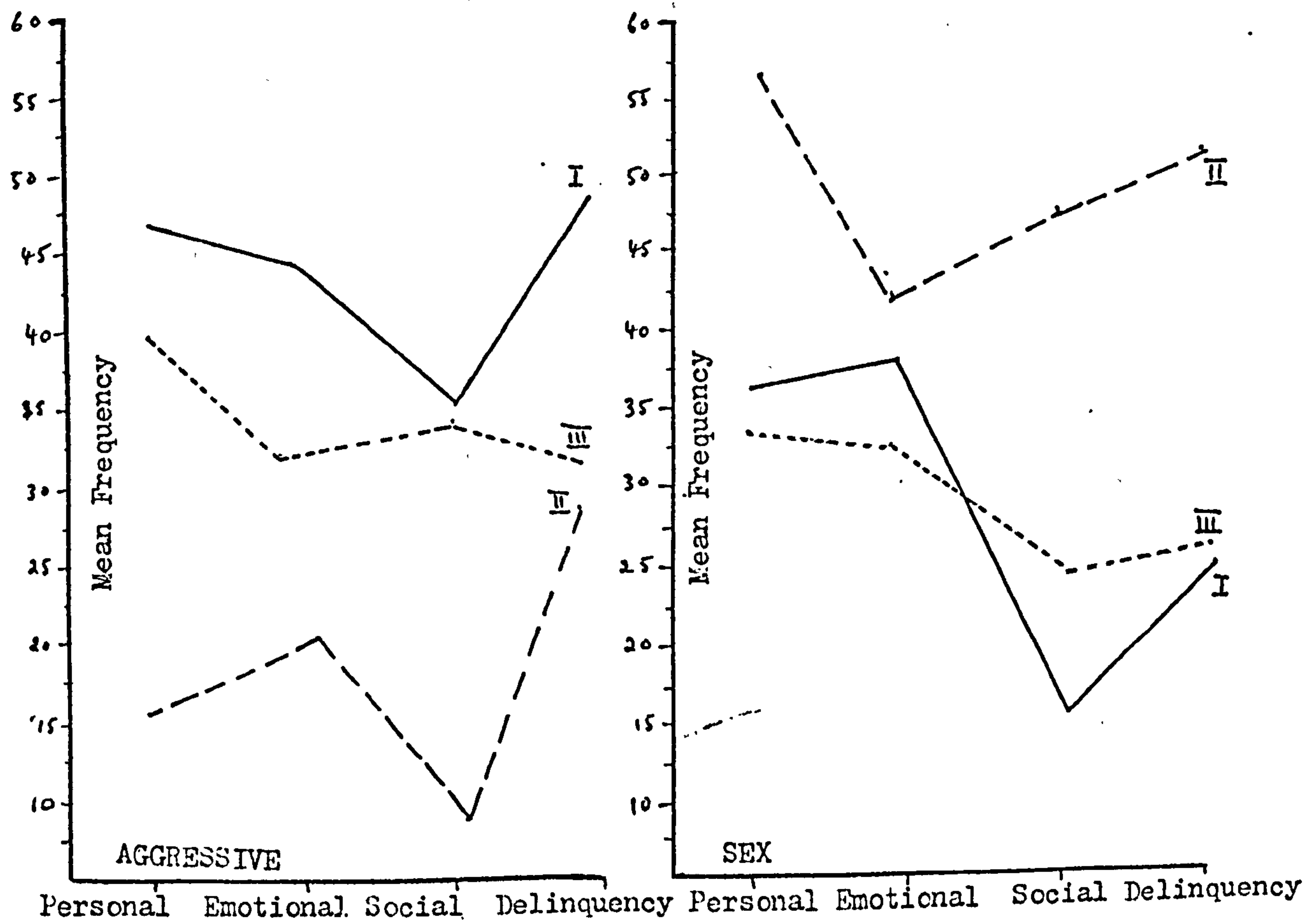
TABLE/

Mean frequencies of Extreme ratings on four groups of concepts by three intelligence subgroups, presented for each offence group separately.



CONCEPTS

CONCEPTS



CONCEPTS

CONCEPTS

TABLE 9.6

t Values and significance level (p) of difference between E ratings of I, II and III on four concept classes. (df = 8)

		<u>CONCEPT CLASS</u>			
<u>Intelligence Groups</u>		<u>Personal</u>	<u>Emotional</u>	<u>Social</u>	<u>Delinquency</u>
I & II	t	6.86	3.25	4.44	13.00
	p	<.001	<.02	<.01	<.001
I & III	t	7.44	5.88	7.37	12.34
	p	<.001	<.001	<.001	<.001
II & III	t	0.39	0.29	0.13	0.62
		>.05	>.05	>.05	>.05

The intelligence group I used the E rating significantly less frequently than groups II and III on all concepts (see Fig. 9.2) Both showed a similar pattern on all concepts.

(b) Drugs

The result of the analusis of E ratings for different intelligence groups on each class of concept is presented in terms of t values and significance level in Table 9.7.

TABLE 9.7

t Values and significance level (p) of difference between E ratings of I, II and III on four concpet classes. (df = 8)

		<u>CONCEPT CLASS</u>			
<u>Intelligence Groups</u>		<u>Personal</u>	<u>Emotional</u>	<u>Social</u>	<u>Delinquency</u>
I & II	t	.10	3.89	.54	.29
	p	>.05	<.01	>.05	>.05
I & III	t	.35	2.74	.50	.60
	p	>.05	<.05	>.05	>.05
II & III	t	.35	.07	.02	.53
	p	>.05	>.05	>.05	>.05

Groups I, II and III did notsignificantly differ in their use of E ratings on all groups of concepts except the Emotional concept (See/

(See Fig. 9.2) on the Emotional Concept. Group I used the E ratings significantly more frequently than groups II and III.

(c) Aggressive

The results of the analysis of E ratings of different intelligence groups on each of the four classes of concepts are presented in terms of t values and the significance level in Table 9.8

TABLE 9.8

t Values and significance level (p) of difference between E ratings of I, II and III on four concept classes. (df = 8)

<u>Intelligence Groups</u>	<u>CONCEPT CLASS</u>				
		<u>Personal</u>	<u>Emotional</u>	<u>Social</u>	<u>Delinquency</u>
I & II	t	5.73	2.66	4.33	3.52
	p	<.001	<.05.	<.01	<.01
I & III	t	1.41	2.10	.24	2.69
	p	>.05	>.05	>.05	<.05
II & III	t	4.91	1.41	4.97	1.92
	p	<.01	>.05	<.01	>.05

Group I used the E ratings significantly more frequently than group II on all groups of concepts. (See Fig. 9.2). Group III used E ratings significantly more frequently than group II on Personal and Emotional concepts while the difference on Emotional and Delinquency concepts was not significant.

(d) Sex

The results of the analysis of E ratings for different intelligence groups on each class of concept are presented in terms of t values and the level of significance in Table 9.9.

TABLE 9.9

t values and significance level (p) of differences between E ratings of I, II and III on four concept groups.

CONCEPT/

TABLE 9.9CONCEPT CLASS

<u>Intelligence Groups</u>		<u>Personal.</u>	<u>Emotional</u>	<u>Social</u>	<u>Delinquency</u>
I & II	t	2.92	0.60	3.14	3.65
	p	<.02	>.05	<.05	<.01
I & III	t	0.46	0.28	1.15	0.55
	p	>.05	>.05	>.05	>.05
II & III	t	3.67	1.48	2.18	3.35
	p	<.01	>.05	>.05	<.01

Group II used E ratings more frequently than other groups, significantly more than group I on all but Emotional concept, and more than group III on Personal and Delinquency concepts. (Fig.9.2) Groups I and III did not differ significantly on any of the groups of concepts.

IX (4) (iii) Hypothesis Tested

In this section results of the two specific hypotheses test are presented.

(a) Hypothesis 1.

It is hypothesised that the "above average" intelligence group used the E ratings significantly less than the "average" intelligence group and that there is a linear relationship between the level of intelligence and the frequency of E ratings.

Method

The Extreme rating of the three intelligence groups I, II and III were pooled together over all concepts and for all offence groups. Means and standard deviations of E ratings for the three intelligence groups are presented in Table 9.10.

TABLE 9.10

	<u>INTELLIGENCE GROUPS</u>		
	I	II	III
Mean	28.40	35.81	34.89
S.D.	16.31	18.65	13.17
n	80	80	80

The significance of the difference between the mean of the three groups was tested by t test.

RESULTS.

<u>Intelligence Groups</u>	<u>t</u>	<u>df</u>	<u>Significance Level</u>
I and II	2.75	158	$p < 1\%$
I and III	2.80	158	$p < 1\%$
II and III	0.35	158	$p > .05$

The above results show that the "above average (I) responded significantly less than the "average" (II) or "below average" (III) groups. However, there is no significant difference between the extreme ratings of "average" or "below average" groups. Therefore, although the highly intelligent subjects score less extreme responses than the rest, a linear relationship between intelligence and Extreme response style does not exist.

(b) Hypothesis

It is hypothesised that "there is a significant positive correlation between Extreme and Neutral responses."

Method

Mean scores of each of the 60 subjects on both Extreme and Neutral categories, over all concepts, were paired and Product-Moment correlation between E and N was worked out.

The results are presented as follows:

Results

	<u>Extreme</u>		<u>Neutral</u>
Σx	1573.10	Σy	1453.60
Σx^2	65492.36	Σy^2	51256.19

$$\Sigma xy = 28971.76$$

$$r = +.004 \quad df = 58 \quad p > .05$$

The/

The above results show that there is no significant correlation between the two scoring categories and the above hypothesis was rejected.

The relationship was also studied within each offence group for each group of concepts, and product-moment correlation between the 16 pairs of E and N responses was not significant ($r = .007$; $df = 28$ $p > .05$).

According to Intelligence, Offence and Concepts grouping, the product-moment correlation between 48 pairs and N responses was not found to be significant ($r = + .009$, $df = 46$, $p > .05$).

The above results have consistently shown that there is no significant relationship between the Extreme and Neutral ratings. Therefore, the above hypothesis is rejected.

IX(5) SUMMARY OF RESULTS

The scale checking styles of the subjects was studied by comparing the frequency of responses observed in each of the three response categories. Extreme category included ratings of 1 and 7. Intermediate, 2, 3 and 5, 6, Neutral having the mid-point score of 4. The scale checking styles for the subgroups was examined in the following way.

- (a) The overall differences or similarities of the three response categories of all subgroups was analysed by means of an analysis of variance with interaction.
- (b) The four offence groups were then compared for their use of different response categories. The analysis has been done for each ability level separately.
- (c) The Extreme responses for the three ability groupings were examined in relation to their ratings of Concepts. For each offence group the three different ability levels were compared.
- (d)/

- (d) Specific hypotheses relating to the level of intelligence and the frequency of E ratings and the correlation between E and N ratings were also tested.

A summary of the results is as follows.

IX (5) (i) Individual Response Categories

Analysis of variance with interaction were carried out on the Extreme, Intermediate and Neutral categories separately. The analysis was done on an Intelligence x Concepts x Offence model.

(a) Extreme Category

Intelligence (or ability) and Offence produced a significant effect on the use of the Extreme category.

There is a significant interaction between Intelligence and Offence. No significant effects are found in concepts or other interactions of factors taken into account.

(b) Intermediate category

All factors show a significant effect on the use of Intermediate category. However, no significant effect is produced by interaction of all three factors i.e. Intelligence, Concepts and Offence.

(c) Neutral Category

The factors like Concepts and Offence produce significant effects on the use of Neutral ratings.

No such differences are found for intelligence factor or the interaction of any of the three factors, except in I and III of the Larceny group.

IX (5) (ii) Extreme Ratings

Comparison ERS for Intelligence groups I, II and III within each offence group, in relation to groups of concepts.

(a) Larceny Group

High/

High intelligence group I scored significantly fewer Extreme responses compared to groups II and III

Intelligence groups II and III, scoring a high frequency of Extreme ratings, differed significantly from group I, but not from each other on any of the four groups of concepts; Personal, Emotional, Social and Delinquency.

(b) Drug Group

The intelligence group I scores a significantly high frequency of Extreme responses on Emotional concepts, compared with groups II and III. No other significant differences were found.

(c) Aggressive Group

All intelligence groups differ significantly in their use of Extreme responses on all concepts. However, intelligence groups I and III do not differ significantly on Social concepts, the only one where this difference is not found.

Group I is the most Extreme in its response style and group II was least Extreme of the three intelligence groups.

(d) Sex Group

Intelligence group II is significantly different from I and III. It is also the most Extreme in its ratings of all concepts. Groups I and III differ significantly only on Social Concepts.

IX (5) (iii) Hypothesis Tested

(a) Intelligence Levels and ERS

The hypothesis that the higher the level of intelligence of the subject, the less the use of ERS was tested. It was found that the "above average" intelligence group, on the whole, used the Extreme category significantly less frequently than the "average" or "below average" groups. The latter two groups did not differ significantly from each other and they had equally high Extreme Response Styles.

The/

The inverse linear relationship between intelligence and the ERS was not found

(b) Neutral and Extreme Categories

The hypothesis that there is a positive significant correlation between Extreme and Neutral ratings was also tested. No significant correlation between the two categories was found

IX (6) DISCUSSION OF RESULTS

The results of the present study show that there exists a significant relationship between extremity of judgment and functioning level of ability and the type of offence. The interaction of ability levels and offence groups in this study show that, though extremity of judgment may be related to these two factors independently, such relationships are more meaningful if the combined effect of the two factors is taken into account. If we accept that extremity of judgment is related to the level of adjustment, as found by other researchers (Norman 1969 : Iwawaki & Zax 1969 : Parsonson 1969 : Zax 1964) it is now possible to identify particularly maladjusted subgroups from the samples in this study.

Among the Larceny group, delinquents with "above average" ability are the least extreme in their judgments. "Average" and "below average" groups are the most extreme and they have a similar response style. This style holds over all groups of concepts i.e. Personal, Social, Emotional and Delinquency. Although the level of intelligence is negatively related to extreme modes of responding (Kerrick 1956 : Stricker & Zax 1966) this relationship is far from being straightforward and conclusive. The supposedly inverse relationship between the two factors was not found in this study, nor the relationship between intelligence and the frequency of extreme responses remain the same over all offence groups and concept classes. It is therefore suggested that high ability delinquents/

delinquents who commit larceny are less 'disturbed' than the "average" and "below average" ability groups. An intelligent boy, in certain circumstances, may act anti-socially in the context of excitement-seeking activity, without necessarily being "pathologically" disturbed. These boys do not seem to be as disturbed as the "average" or "below average" groups of delinquents who are thought to have a more serious underlying disturbance of development, which they manifest deliberately in anti-social behaviour. An intelligent boy may steal a car for example, for the excitement of a new stimulating emotional experience.

The "above average" delinquents on larceny charges would seem to need training in skills, so that they may learn to channel their need for excitement in a more socially acceptable way. Whereas the "average" and "below average" boys committing similar offences seem to need a more comprehensive training and treatment programme which can be provided in a more formal setting like a Borstal.

The Drug group presents a different picture in that the three intelligence groups do not differ in their extremity of judgment. However, highly intelligent boys show a more extreme response style on Emotional concepts. Again, it may be that highly intelligent boys who take drugs are more emotionally disturbed. This observation has also been reported in the literature on drug addiction (Kaldegg 1975 : Cockett 1971).

It may be that boys most at risk for later drug addiction are those who are highly intelligent, very highly anxious and ^{is} a long history of under-achievement at school. They may try to blank out their consciously felt inadequacies and boredom by the use of drugs. Such problems do not exist for the "average" and the "below average" drug taker to the same extent. They may be much more likely to give up the use of drugs, while the highly intelligent ones may need special therapeutic environments/

environment with particular attention to their emotional development and recognition that they are not essentially criminal, but they are highly anxious individuals. This does not seem to be so important for "average" and "below average" drug takers.

In the Aggressive group, the "above average" and "below average" groups are more extreme in their judgment than the "average" group. A highly intelligent delinquent who takes to over-aggressive behaviour appears to be the most disturbed, followed by the one who is "below average". This pattern holds over all groups of concepts, except the Social one on which groups I and III are equally extreme, perhaps indicating a lack of social skills. The "average" ability aggressive boy seems to be least disturbed of all.

Among the Sex offenders, the boys with "average" intelligence are the most extreme and they appear to show a more severe and generalised disturbance. Though the three ability groups are equally extreme on Emotional Concepts, the sex offender with "average" ability shows a more global maladjustment. Groups I and III are similar to each other in their extremity of judgment; they appear to be more disturbed on Personal and Emotional areas than the Social and Delinquency groups of concepts. This shows that, though their offence can be seen as acting out socially, its origins may lie deep within the personality.

It seems plausible that, for the training, allocation and treatment of delinquents, factors like functional ability and its relationship with the type of offence should be taken into account. The above results strongly suggest that special attention is needed in the selection, treatment and training programme in Borstals for highly intelligent boys who are drug addicts or those who resort to violent behaviour. Highly intelligent boys committing larceny may well respond better to a different mode of treatment than "average" and "below average" groups. Individual and/

and intensive therapeutic treatment for sex offenders with "average" intelligence would seem to be more appropriate for they appear to be more deeply disturbed than any other group.

CHAPTER X
REPERTORY GRID ANALYSIS
THE TOTAL SAMPLE

RESULTS (B)

The method of analysis and its rationale have been discussed in Chapter VII. In this chapter, the results of the grid analysis carried out on the whole data are presented. The main findings regarding the changes in ratings will be presented and only the salient features of the computer programme print out will be described, where relevant.

X (1) THE GRID OF DIFFERENTIAL CHANGES

The grid of differential changes is presented in Table 10.3. This is essentially a table of deviations which has a row for each construct and a column for every element. Each entry in it is the difference between the ratings assigned to the element in terms of the construct and the mean differences in the ratings of all the elements in terms of that construct. If the entry is positive, the differential change is above the mean and, if negative, it is below the mean. To indicate test-retest differences, Slater uses the term "uprated" when second rating of an element is on the whole higher than the first rating and the term "down rated" when the second rating is lower than the first. In other words, a positive entry indicates that the element is "uprated" (is moved from rating of 1 to 7 or from Good to Bad) A negative entry indicates that the element has been "downrated". Further analyses are carried out on the Grid of Differential Changes. Figs 10.1 to 10.20 present the differential changes observed in the ratings of individual constructs on each of the twenty elements. (The results are incorporated in Section X (5).)

X (2) THE PRINCIPAL COMPONENTS

Table 10.1 gives the latent roots of the components listed in the output from the analysis of the grid. The first component accounts for 28.35 of the observed variation, the second component over 20% and the third, more than 10% totalling nearly 60% for the first three components. The first six components included in further analysis totalled/

TABLE 10.1PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	5.6696	28.35
2	4.0840	20.42
3	2.1135	10.57
4	1.6746	8.37
5	1.3320	6.66
6	1.0598	5.30
7	.9741	4.87
8	.7633	3.82
9	.6494	3.25
10	.4027	2.01
11	.3206	1.60
12	.2456	1.23
13	.2112	1.06
14	.1863	.93
15	.1188	.59
16	.1144	.57
17	.0567	.28
18	.0211	.11
19	.0023	.01

TABLE 10.2

OVERALL AMOUNT AND DIRECTION
OF CHANGES OBSERVED IN ELEMENTS.

<u>ELEMENTS</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	3.034	1.550	7.75
2. IDEAL SELF	-.522	.649	3.25
3. FATHER	-.579	1.178	5.89
4. MOTHER	-.735	1.166	5.83
5. FAMILY	1.314	.857	4.28
6. DISCIPLINE	-2.505	1.651	8.26
7. POLICE	.094	.916	4.58
8. LAW	-.072	.458	2.29
9. PRISON OFFICERS	1.953	.562	2.81
10. AGGRESSION	1.323	2.420	12.10
11. LOVE	-1.717	1.042	5.21
12. EXCITEMENT	-2.483	1.138	5.69
13. GUILTY FEELINGS	1.928	.999	4.99
14. SEX	-.479	.485	2.42
15. MY OFFENCE	2.188	.687	3.44
16. BORSTAL TRAINING	-1.620	1.807	9.04
17. MY MATES	1.076	.610	3.05
18. OTHER PEOPLE	-.764	.778	3.89
19. WORK	-.765	.392	1.96
20. LIFE OUTSIDE	-.668	.655	3.27

TABLE 10.3
GRID OF DIFFERENTIAL CHANGES
ELEMENTS

CONSTRUCTS	1	2	3	4	5	6	7	8	9	10.
	SELF	IDEAL SELF	FATHER	MOTHER	FAMILY	DISCIPLINE	POLICE	LAW	PRISON OFFICERS	AGGRESSION
1. GOOD-BAD	.45	-.12	-.21	-.19	.04	-.63	.33	-.54	.04	.67
2. BEAUTIFUL-UGLY	.20	.02	-.18	-.06	.08	.04	.28	-.22	.05	.49
3. USEFUL-WORTHLESS	.55	-.08	.06	-.06	.03	-.59	-.07	-.05	.18	.61
4. KIND-CRUEL	-.11	.10	-.14	-.12	.11	-.14	.07	.18	.11	.48
5. PLEASANT-UNPLEASANT	-.12	-.31	-.17	-.18	.21	-.01	.26	.08	.10	.61
6. NICE-AWFUL	-.19	-.24	-.49	-.21	-.14	-.15	.27	-.15	.11	.69
7. FAIR-UNFAIR	-.02	-.36	.12	-.14	.07	-.20	.26	-.01	.21	.47
8. CHANGEABLE-UNCHANGABLE	-.03	.06	-.07	-.25	-.09	.04	.11	.10	.01	-.33
9. POSITIVE-NEGATIVE	.35	.19	-.02	-.11	-.01	-.55	.10	.01	.06	-.14
10. STRONG-WEAK	.50	-.23	-.33	.07	-.28	-.57	-.26	.00	.38	.03
11. ROUGH-SMOOTH	.24	-.04	.43	.51	.19	-.05	-.05	-.02	-.10	-.18
12. HARD-SOFT	.86	.14	-.02	.44	.30	-.29	-.27	-.10	-.20	-.40
13. RUGGED-DELICATE	.14	.11	-.22	.25	.05	-.16	-.30	-.11	-.06	-.17
14. INTENSE-MILD	-.03	.07	.24	.14	.45	.31	-.02	.01	-.10	-.23
15. MASCULINE-FEMININE	.17	.08	-.29	.17	-.15	-.05	-.27	.09	.09	-.10
16. FAST-SLOW	.47	-.01	.07	-.21	-.11	-.43	-.27	.11	.10	.23
17. ACTIVE-PASSIVE	.25	.28	.19	-.28	.81	.00	-.40	-.30	.30	-.19
18. TENSE-RELAXED	-.27	-.02	.46	.18	-.01	-.04	.05	.26	.28	-.22
19. EXCITABLE-CAIM	-.09	-.37	.19	-.25	.02	.25	.12	.18	.35	-.21
20. COMPLEX-SIMPLE	.26	.08	-.27	-.48	.00	.25	.18	-.03	.12	-.31

TABLE 10.3 (CONTINUED)

	11	12	13	14	15	16	17	18	19	10
	LOVE	EXCITEMENT	GUILTY	SEX	MY CRIME	BORSTAL	MY MATES	OTHER	WORK	LIFE
	FEELINGS					TRAINING		PEOPLE		OUTSIDE
1. GOOD-BAD	-.32	-.31	.35	-.17	.50	.29	.02	-.08	-.14	.02
2. BEAUTIFUL-UGLY	-.40	-.29	-.01	-.22	.28	.17	.15	-.31	-.06	.00
3. USEFUL-WORTHLESS	-.43	-.45	-.18	-.16	.34	-.45	.45	.06	.08	.20
4. KIND-CRUEL	-.17	-.37	-.01	.03	.04	.08	.32	-.17	-.12	-.16
5. PLEASANT-UNPLEASANT	-.49	-.46	.41	-.19	.14	.32	-.17	-.05	.01	-.01
6. NICE-AWFUL	-.38	-.27	.66	-.06	.36	.15	.16	.17	.02	-.31
7. FAIR-UNFAIR	-.12	-.07	.07	-.09	.11	-.05	-.04	.12	-.22	-.11
8. CHANGEABLE-UNCHANGABLE	-.01	-.20	.29	.23	.03	.55	-.08	-.53	-.07	.23
9. POSITIVE-NEGATIVE	.01	-.02	-.03	.16	.00	-.20	-.19	.26	.07	.06
10. STRONG-WEAK	-.10	-.09	.50	.04	.35	-.30	.20	.10	-.03	.00
11. ROUGH-SMOOTH	-.05	.02	-.11	.21	.09	-.48	-.32	-.23	-.01	-.03
12. HARD-SOFT	-.44	.11	.32	-.18	-.06	-.80	.01	-.38	.03	.05
13. RUGGED-DELICATE	.36	.21	-.21	.13	.18	-.33	-.10	.00	.03	.19
14. INTENSE-MILD	.01	-.36	-.13	-.07	-.05	.13	.16	-.08	-.13	-.34
15. MASCULINE-FEMININE	-.08	.00	.21	-.21	.13	-.12	.11	.06	-.07	.23
16. FAST-SLOW	-.21	.18	.06	-.09	.16	-.20	.10	.25	-.08	-.13
17. ACTIVE-PASSIVE	.05	.18	.37	-.33	-.28	-.32	.22	-.03	-.29	-.26
18. TENSE-RELAXED	.25	.07	-.18	.12	-.21	-.55	.13	-.14	-.16	-.01
19. EXCITABLE-CALM	-.21	-.21	.03	.03	.20	-.05	.02	-.07	.38	-.30
20. COMPLEX-SIMPLE	-.07	-.36	.11	.12	.09	.24	.09	.07	-.01	-.09

FIG. 10.1

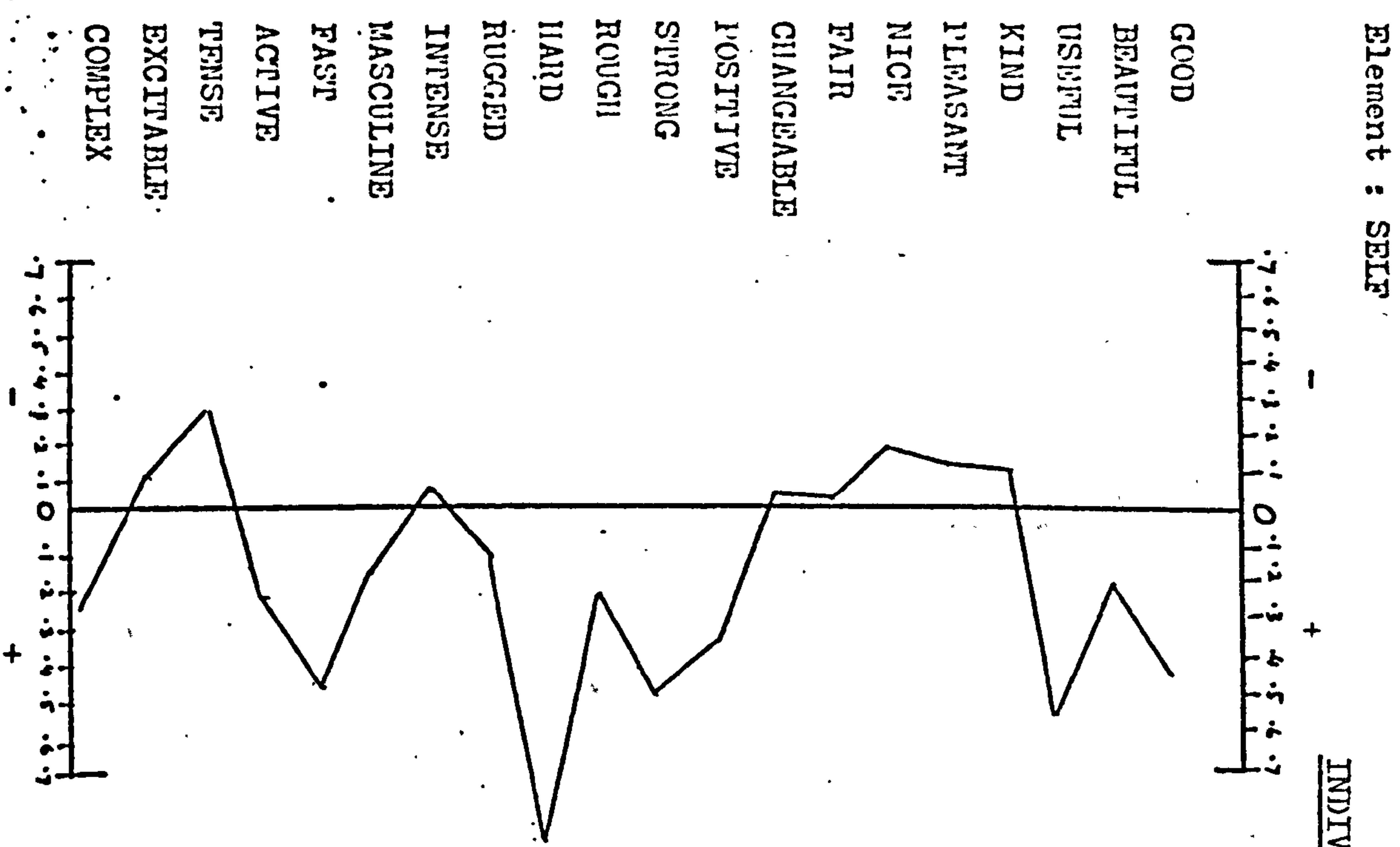


FIG. 10.2

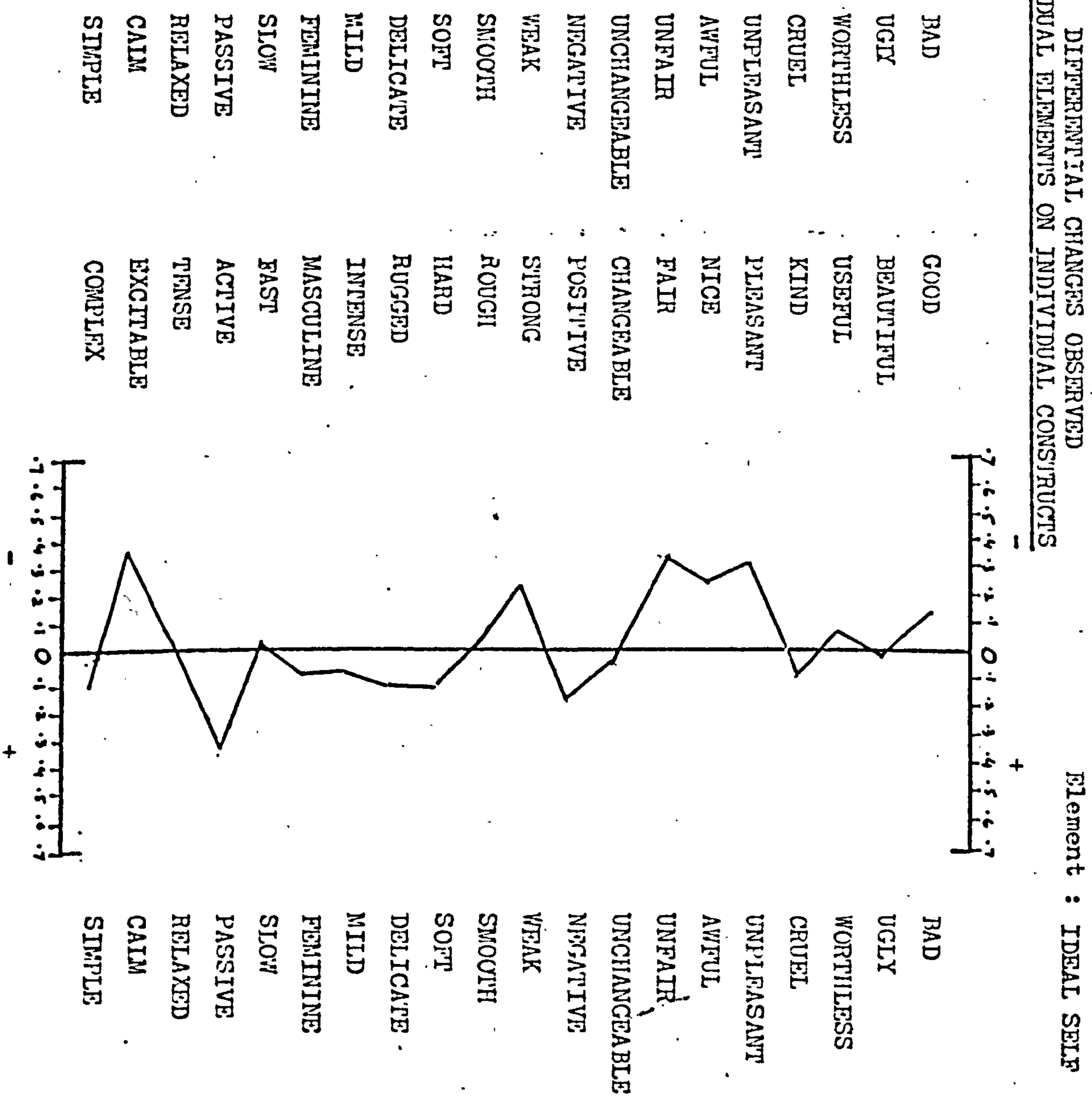


FIG. 10.3

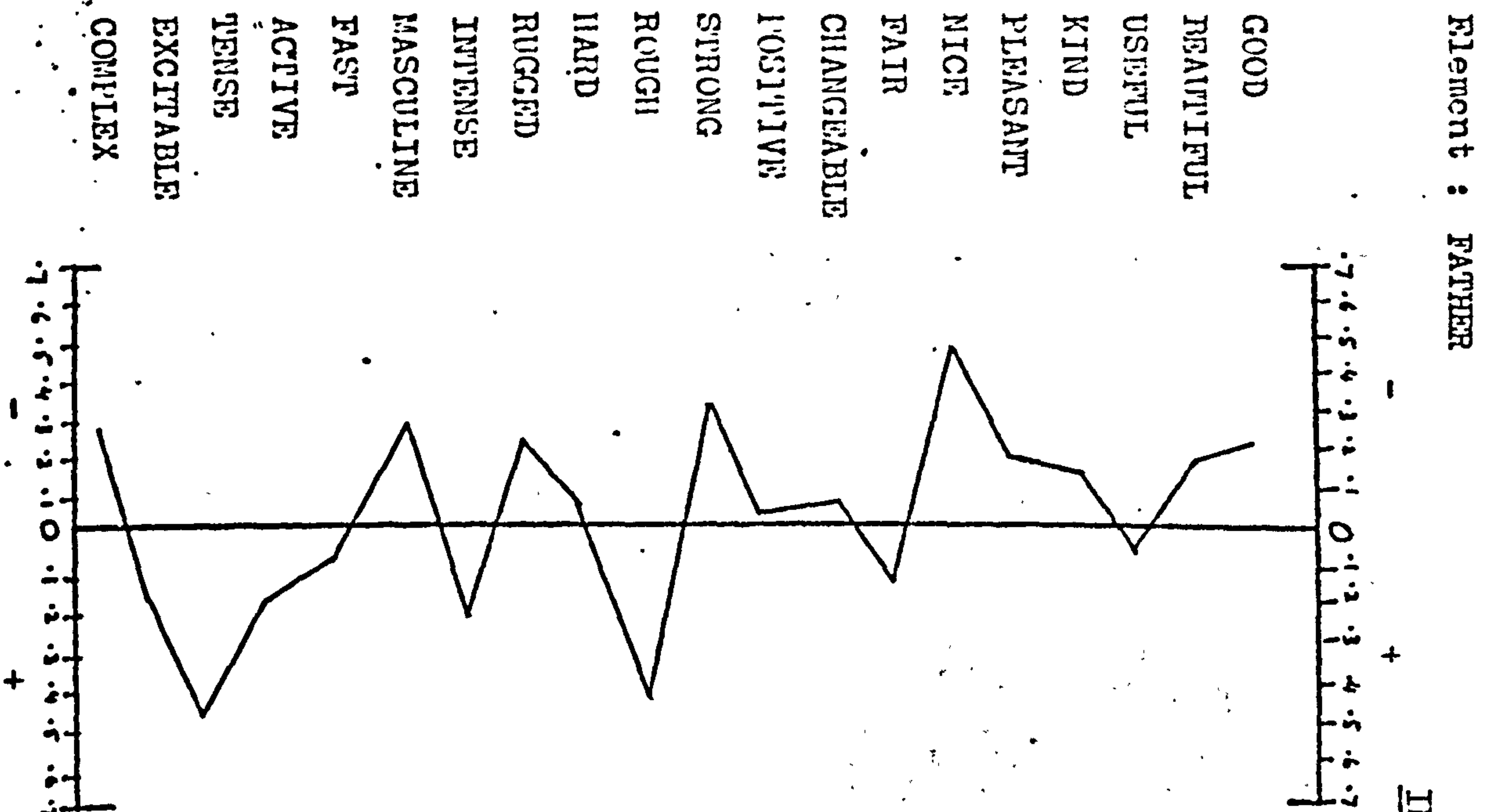


FIG. 10.4

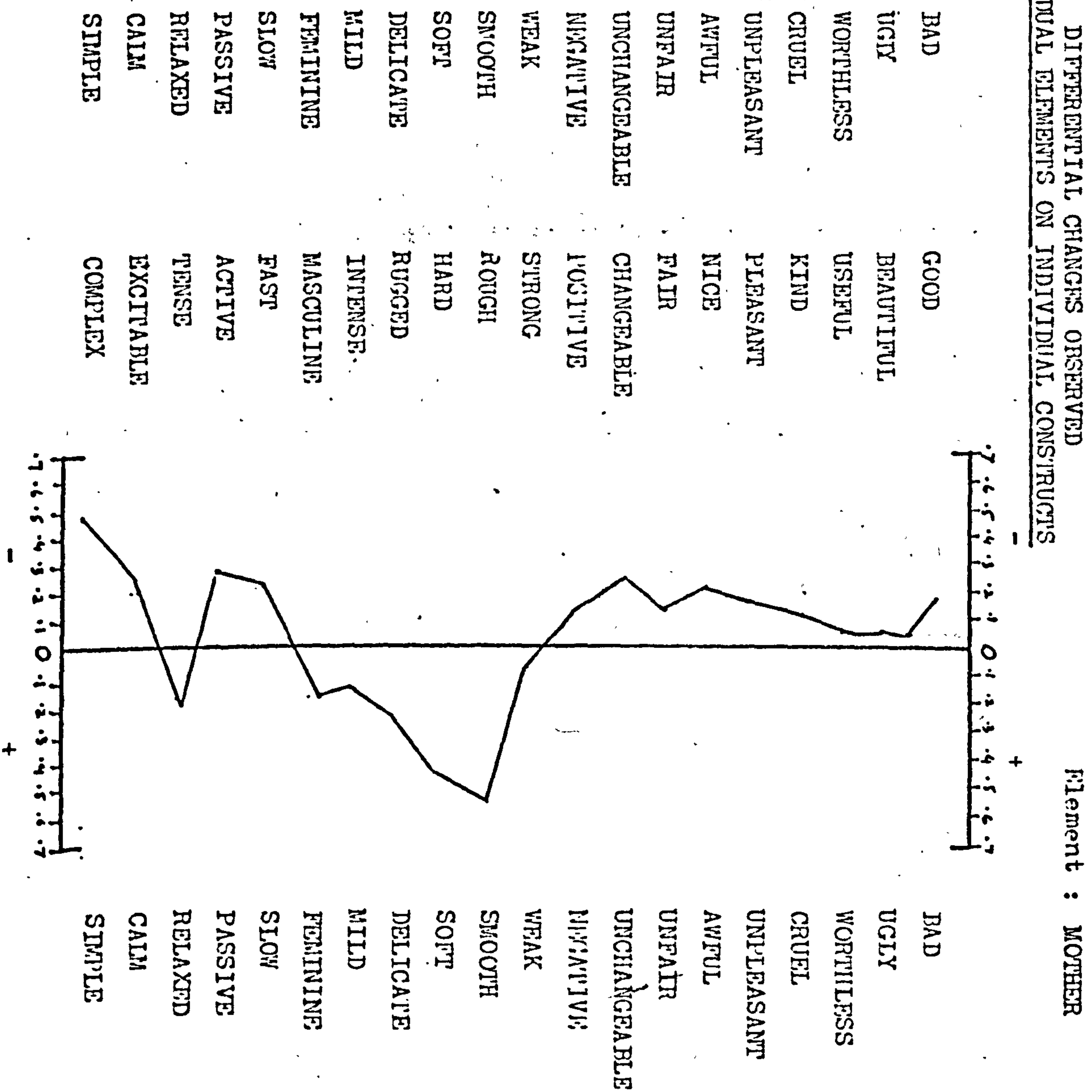


FIG. 10.5

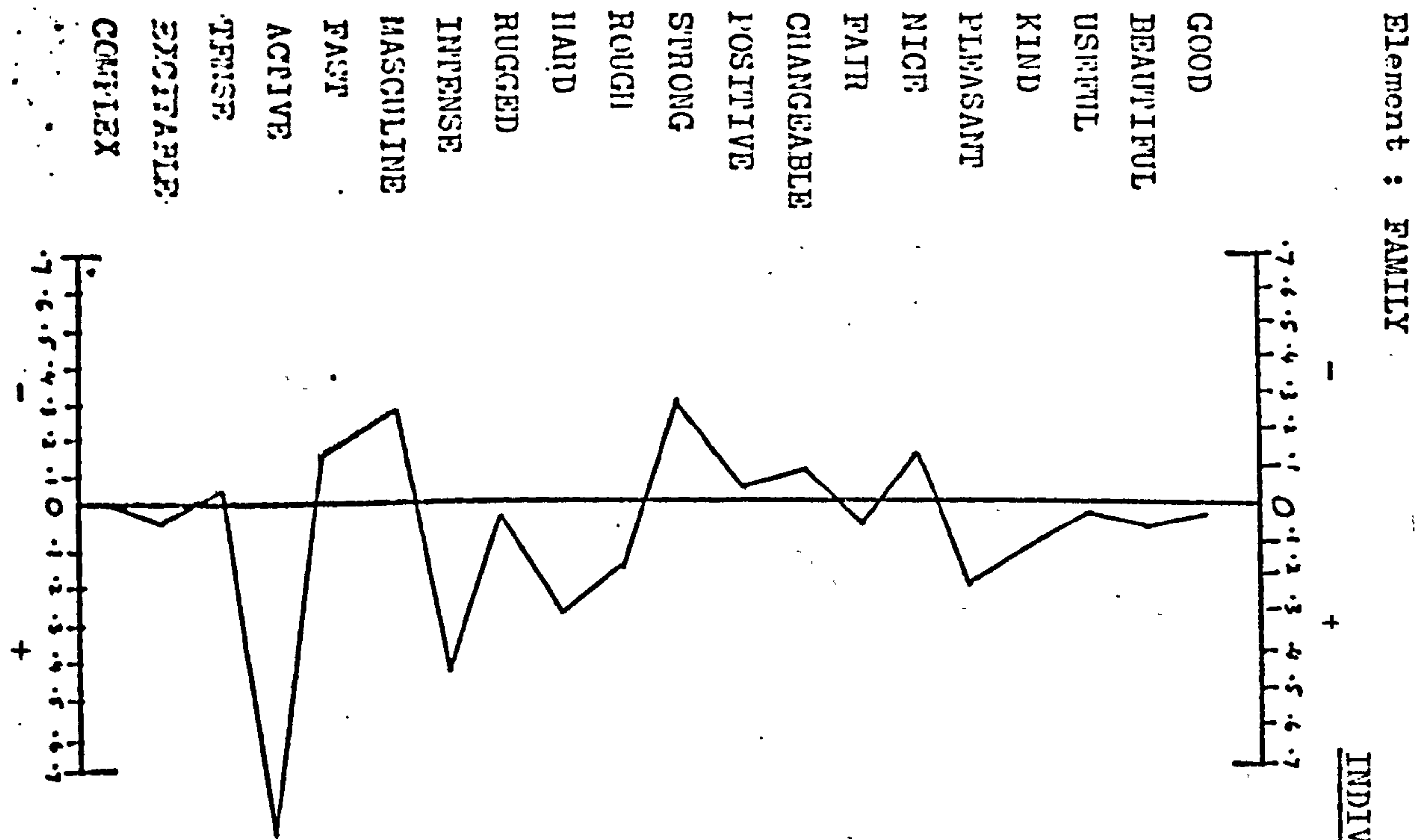


FIG. 10.6

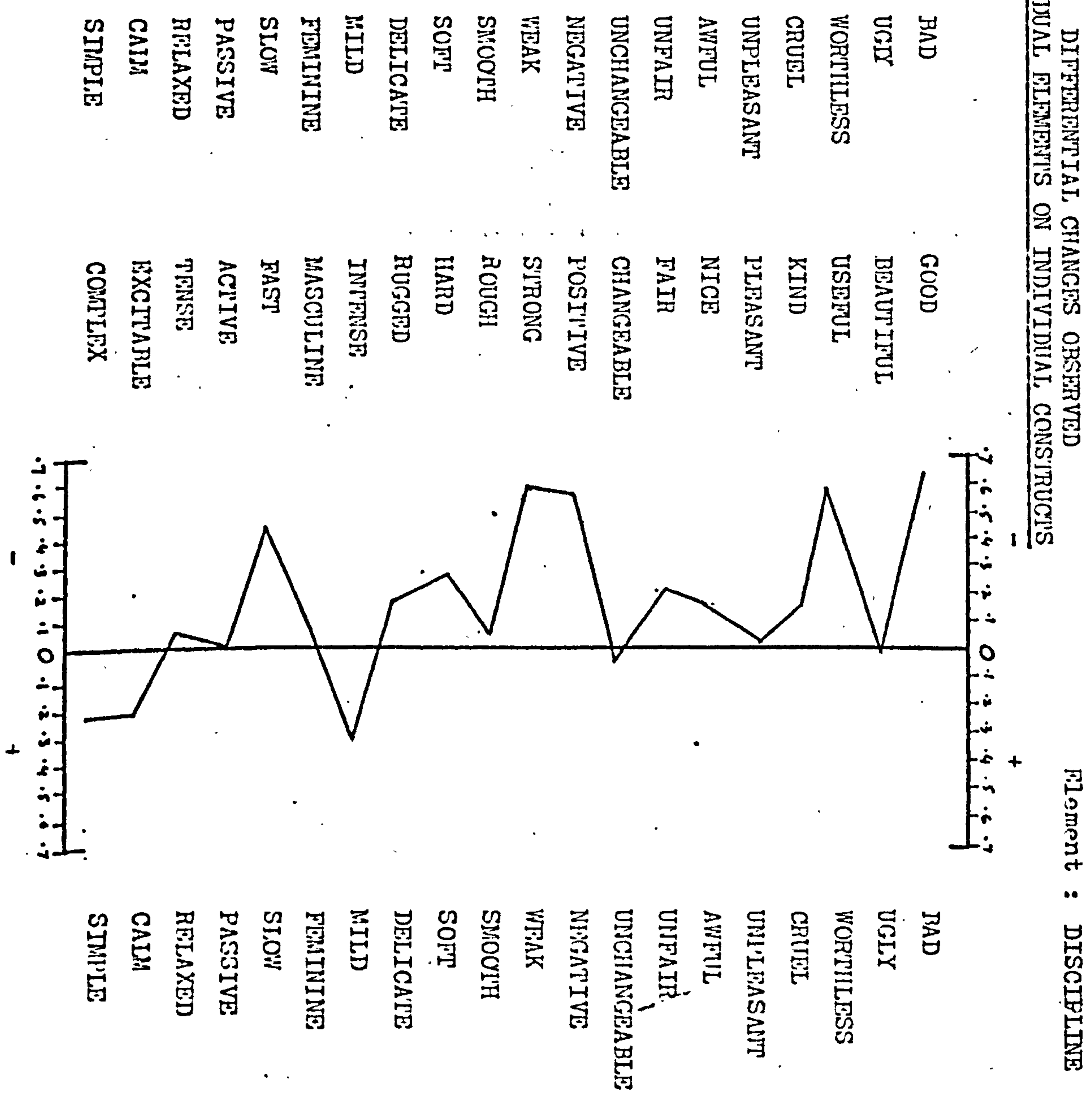


FIG. 10.7

Element : POLICE

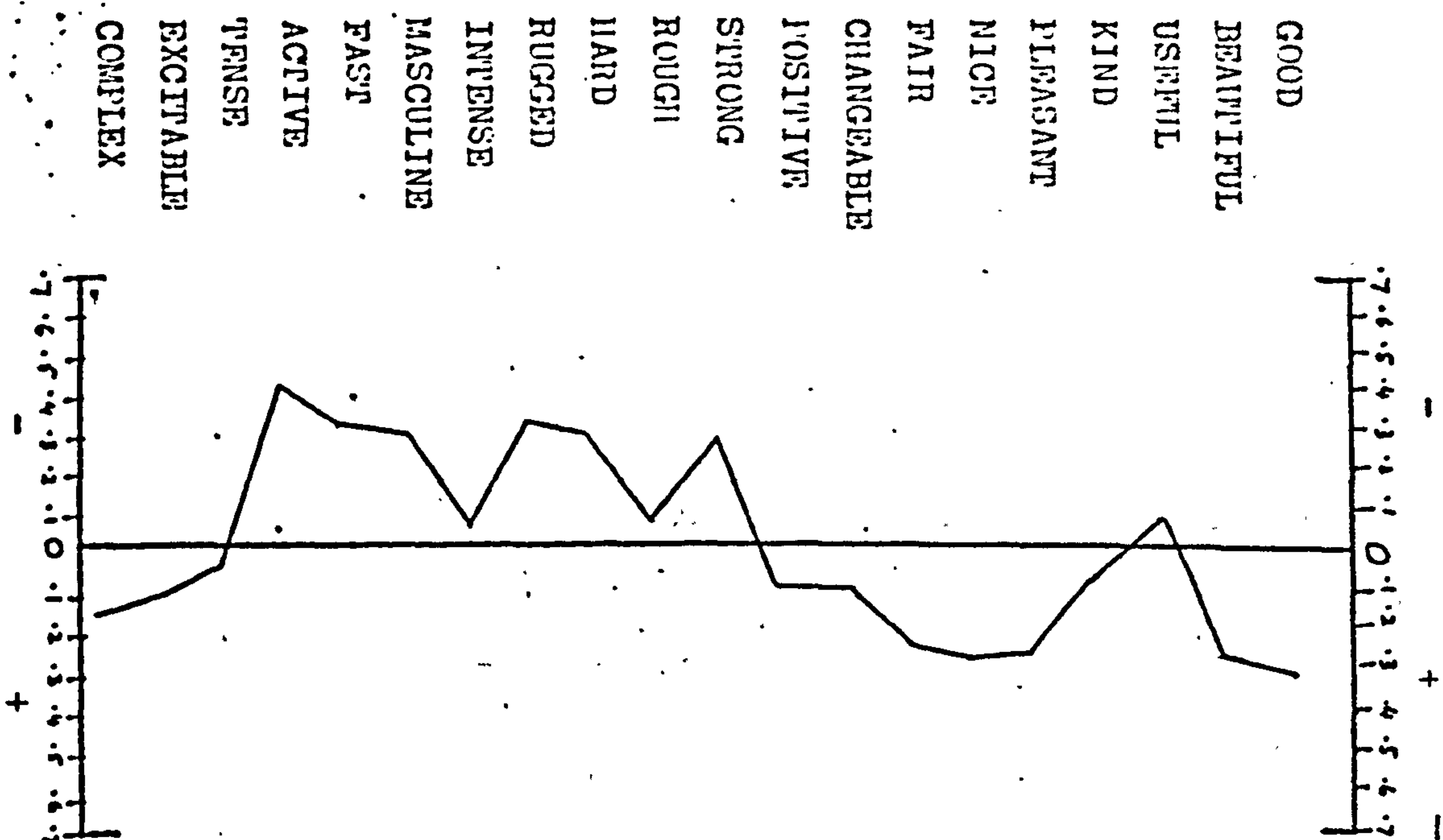


FIG. 10.8

Element : LAW

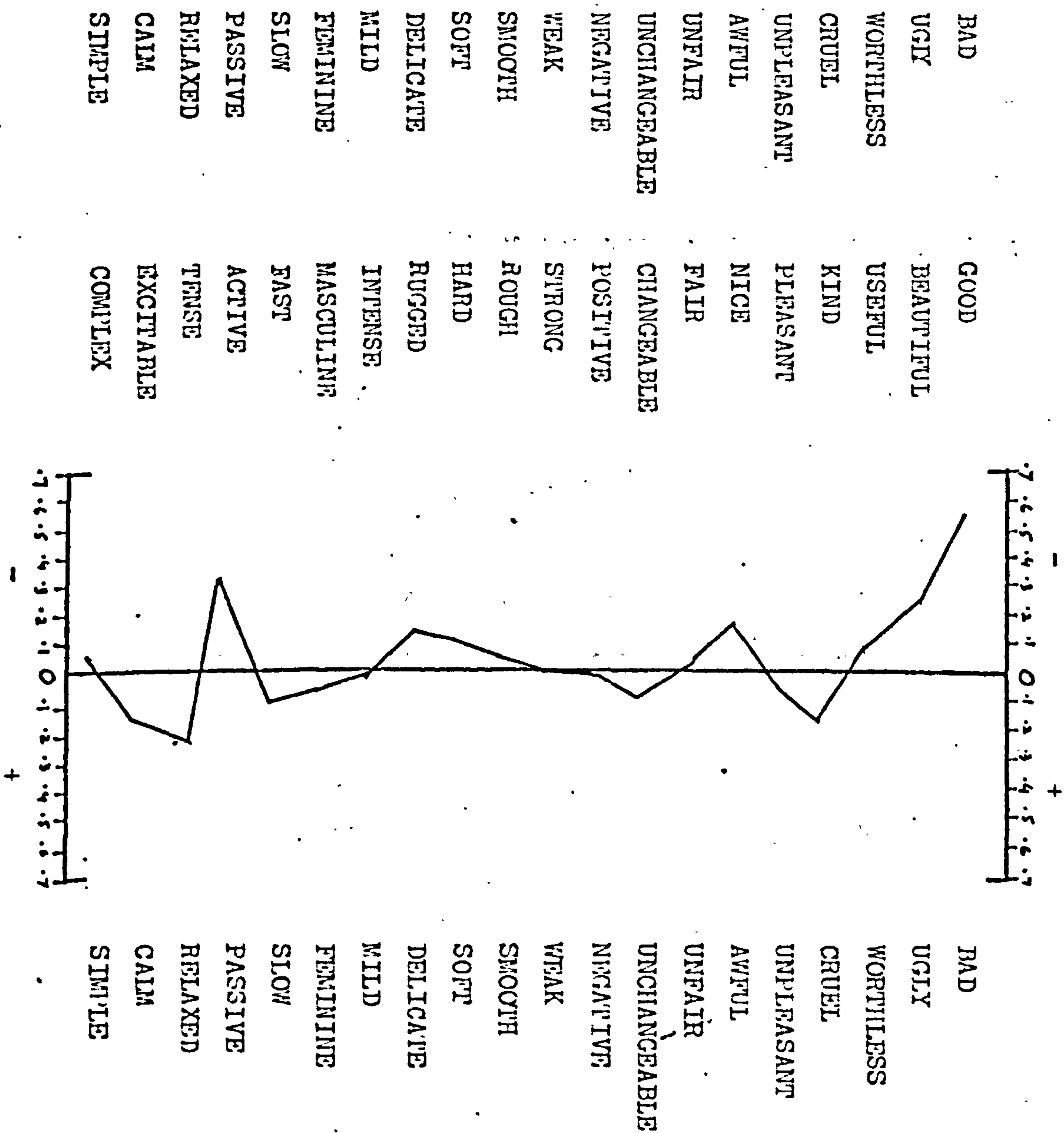


FIG. 10.9

Element : PRISON OFFICERS

DIFFERENTIAL CHANGES OBSERVED
INDIVIDUAL ELEMENTS ON INDIVIDUAL CONSTRUCTS

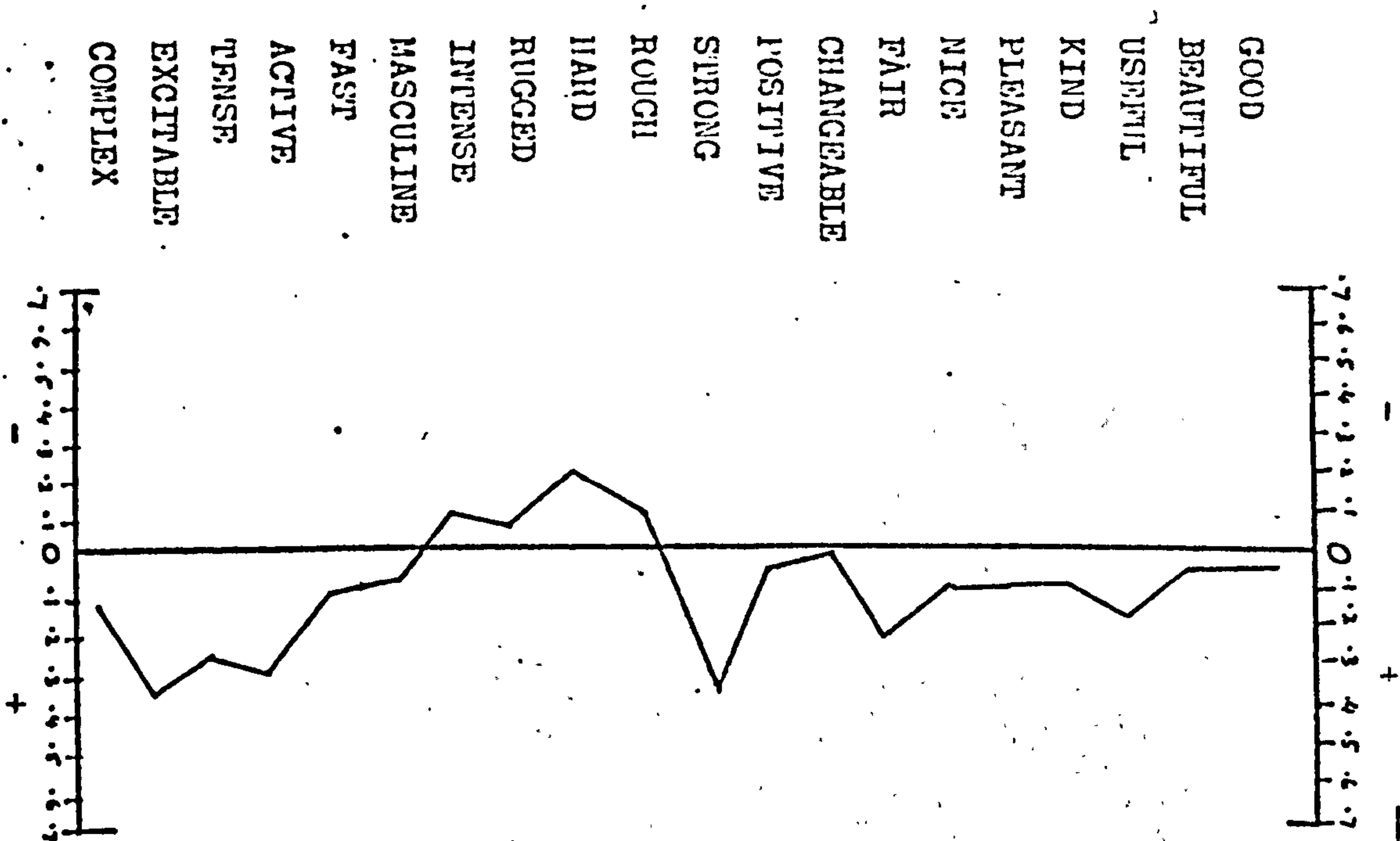


FIG. 10.10

Element : AGGRESSION

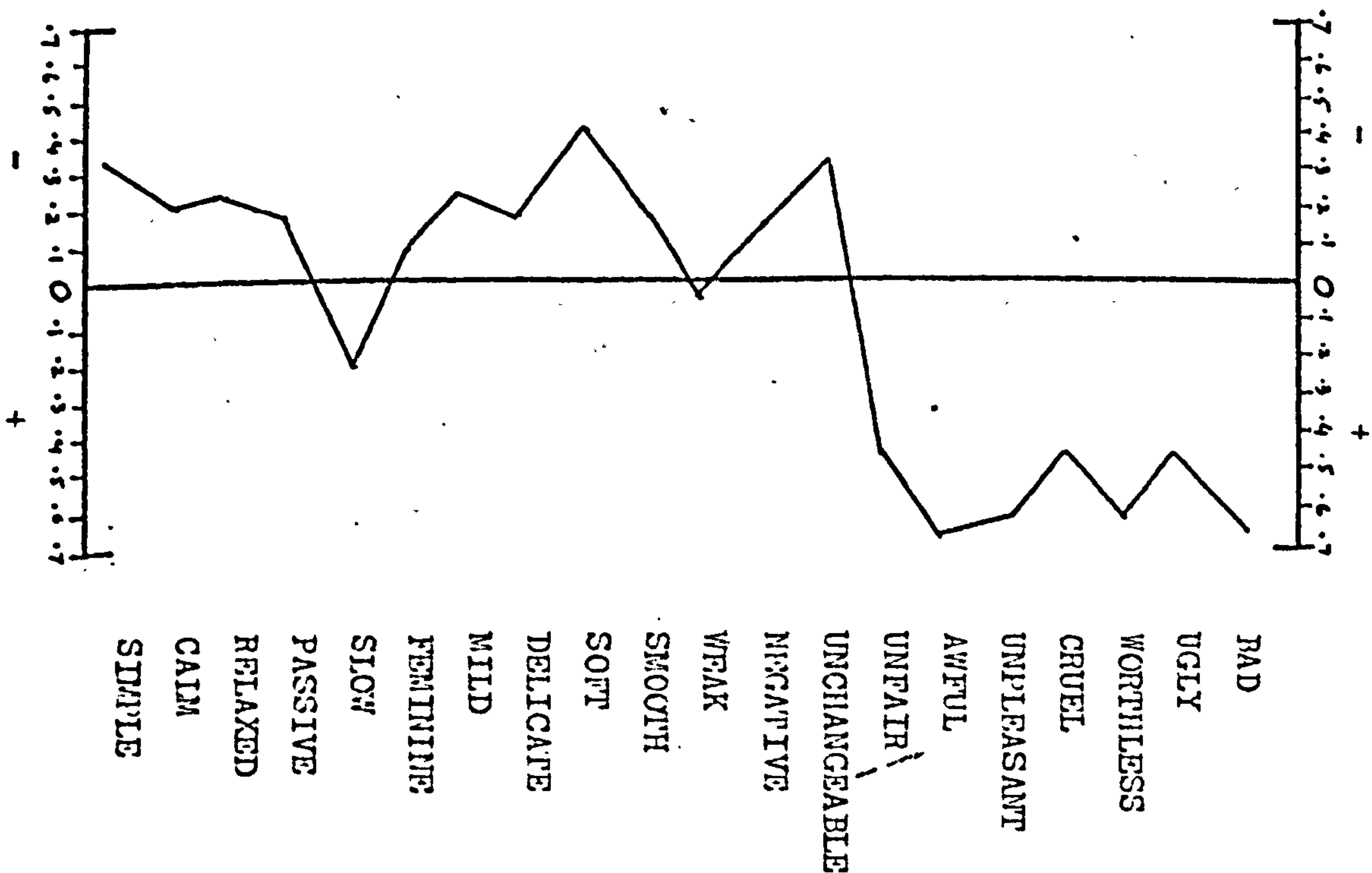


FIG. 10.11

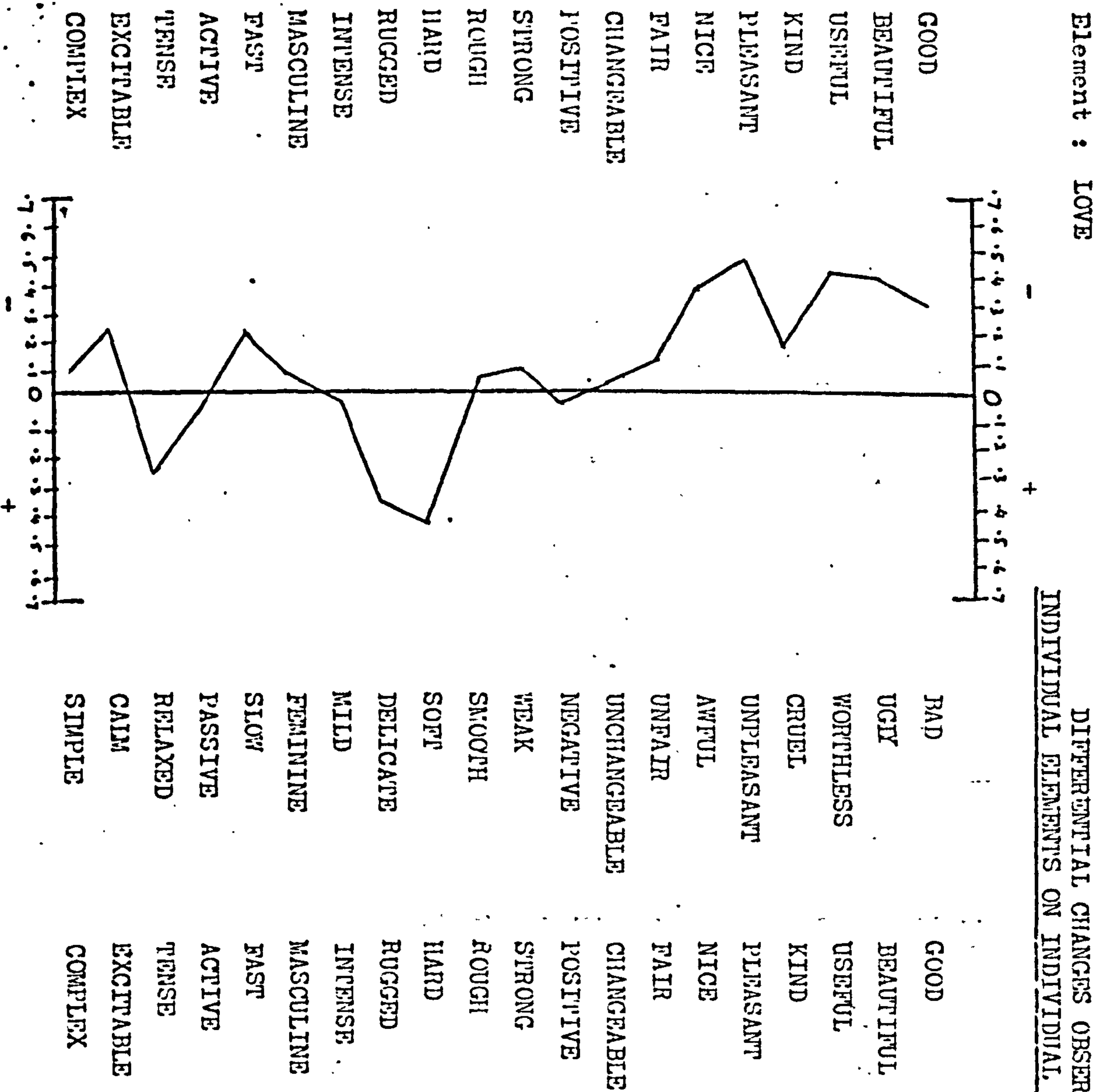


FIG. 10.12

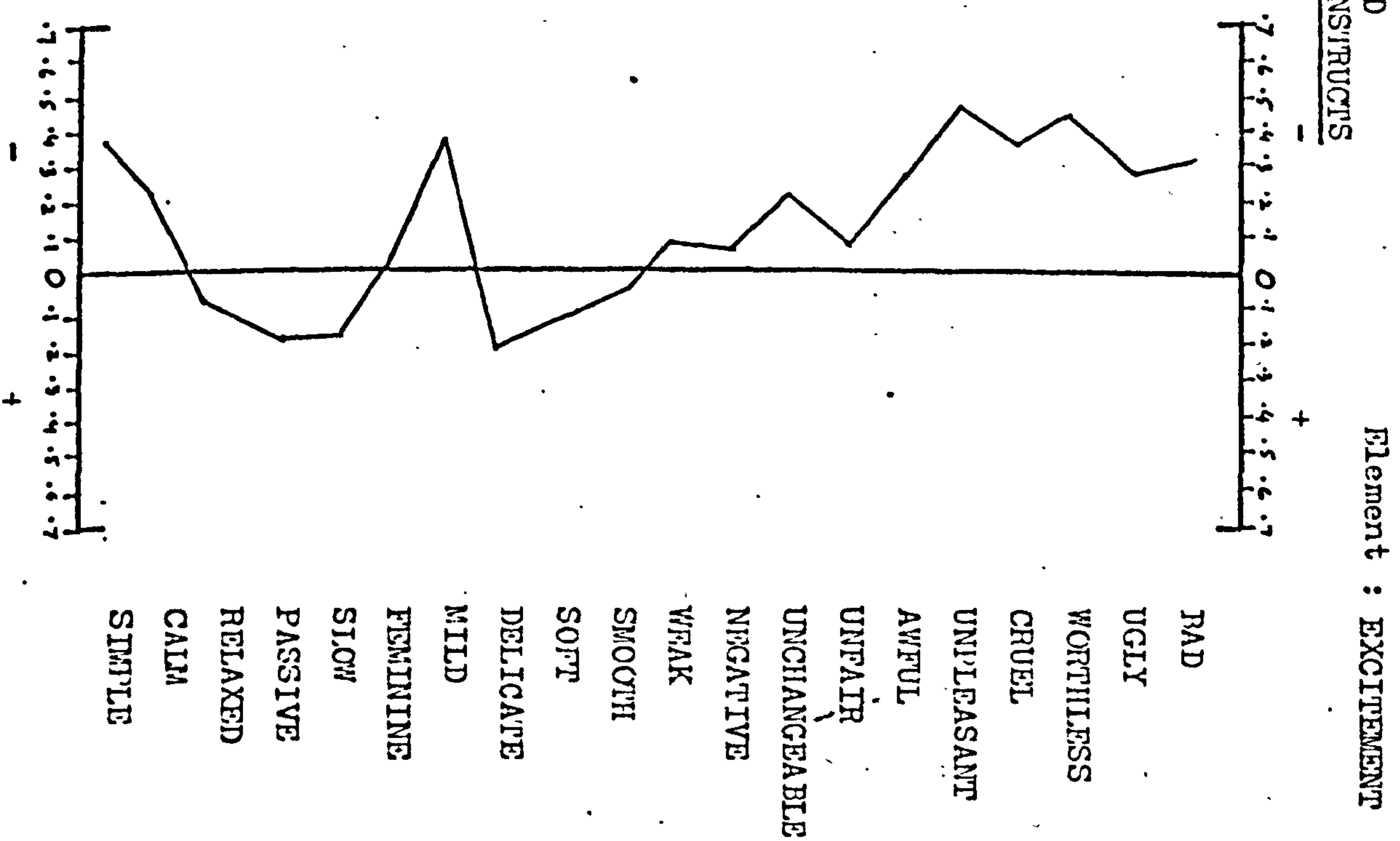


FIG. 10.13

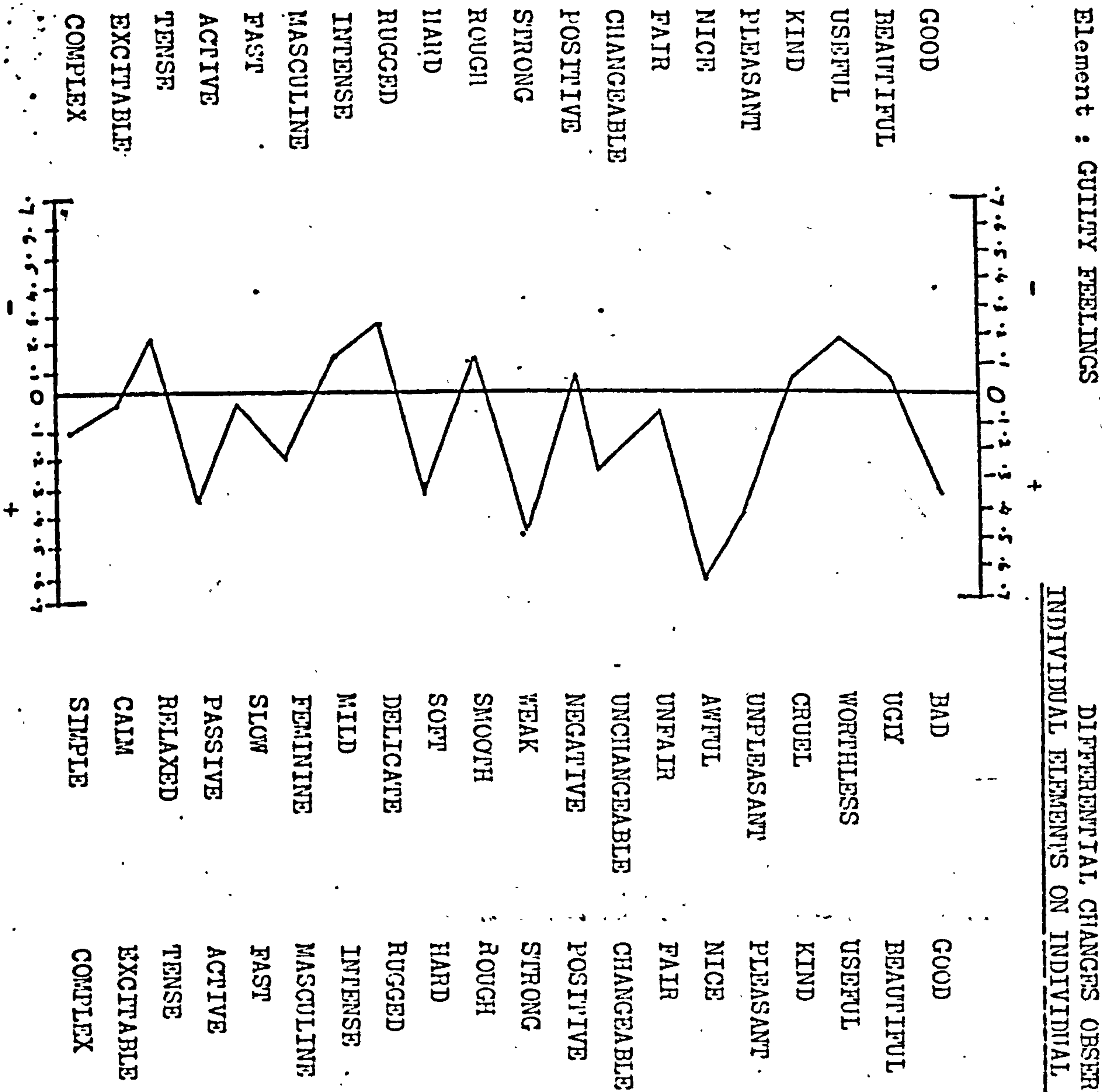


FIG. 10.14

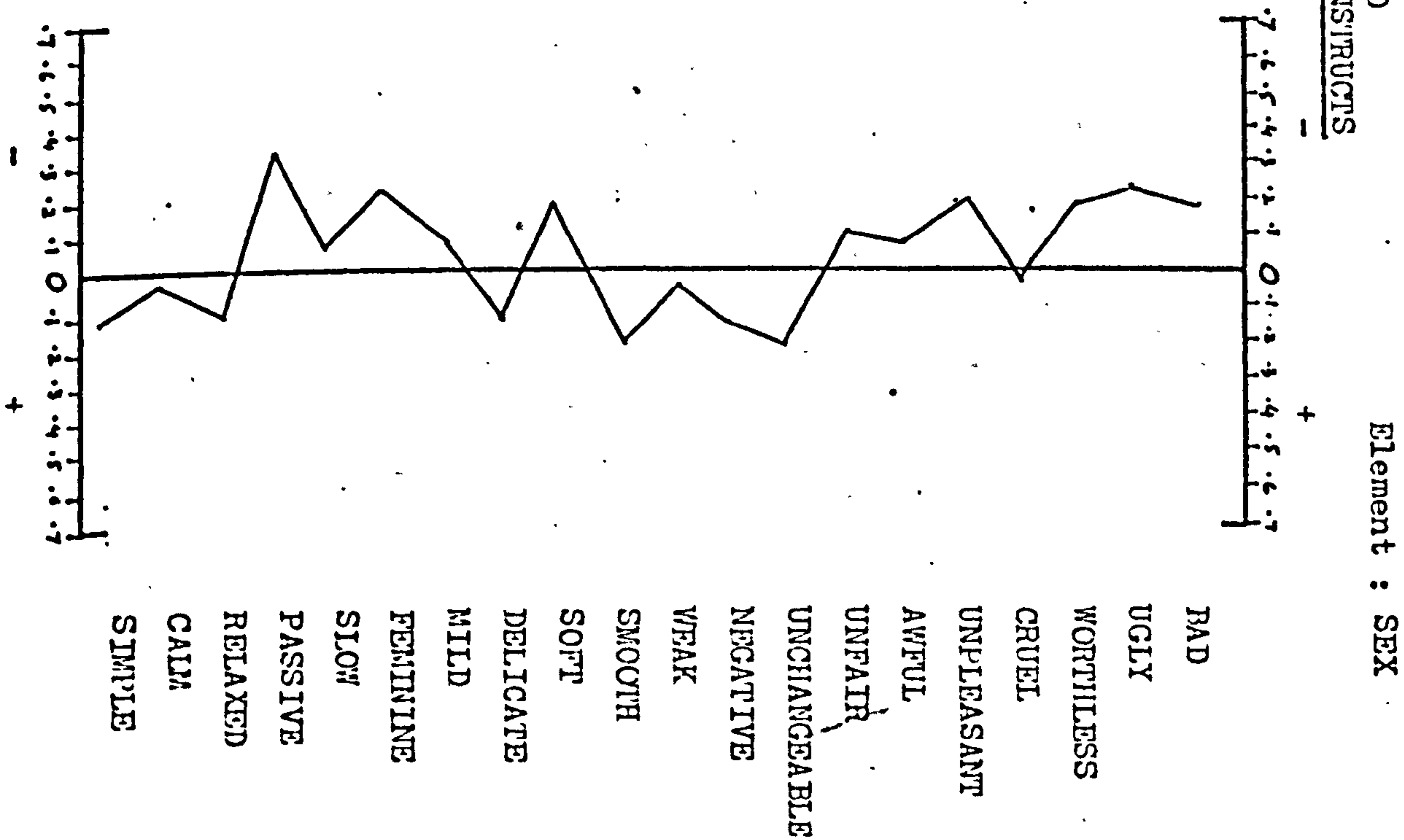


FIG. 10.15

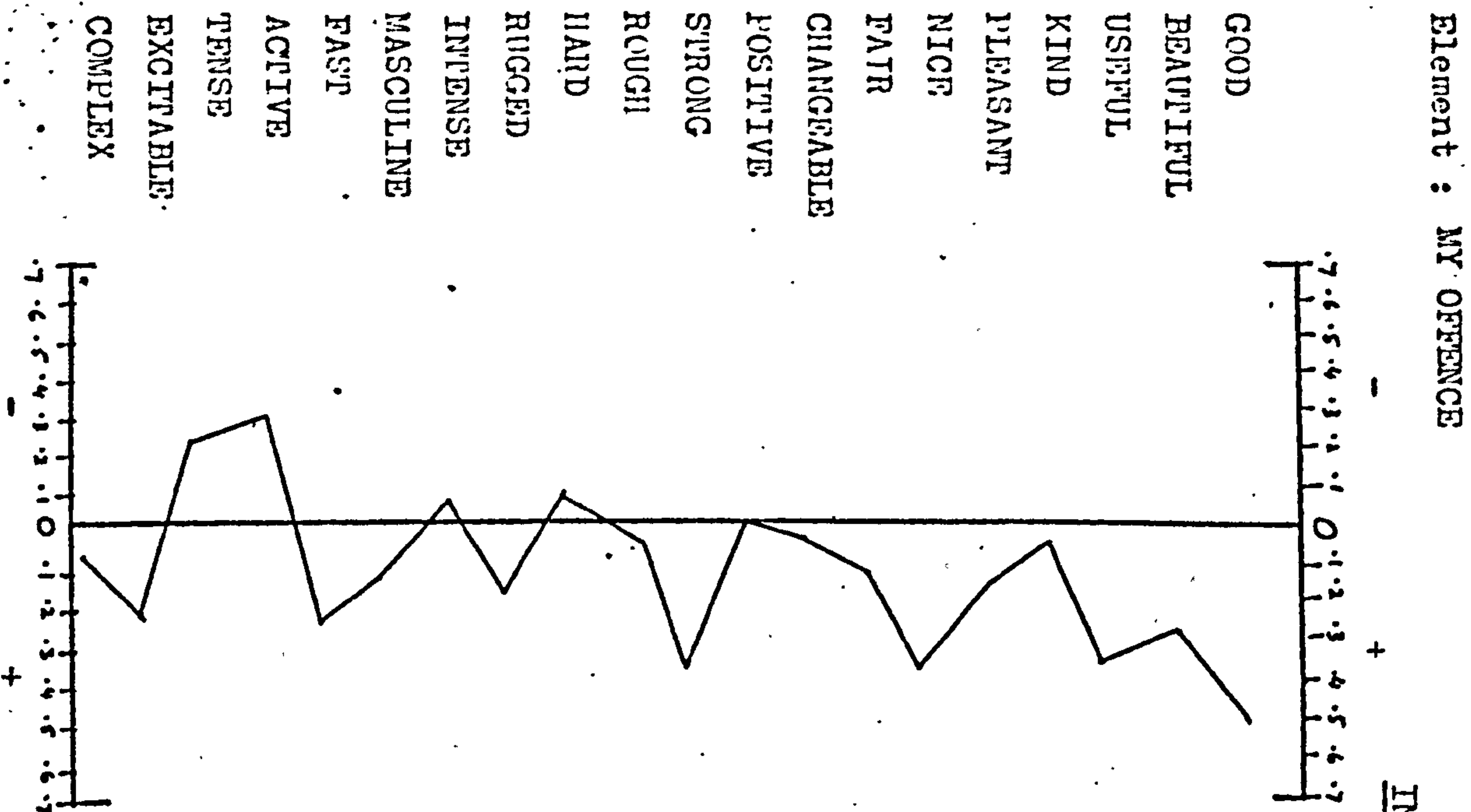


FIG. 10.16

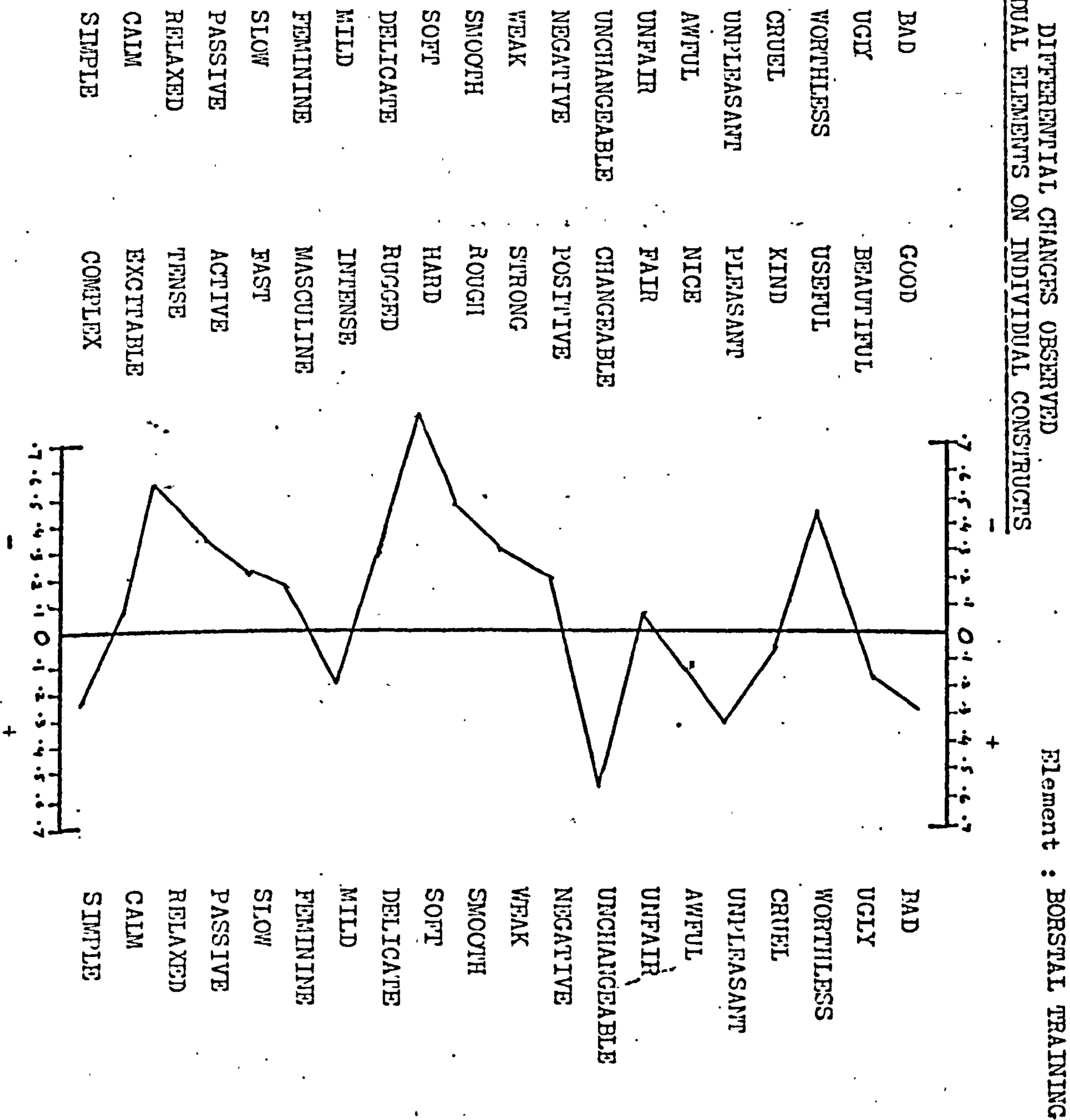


FIG. 10.17

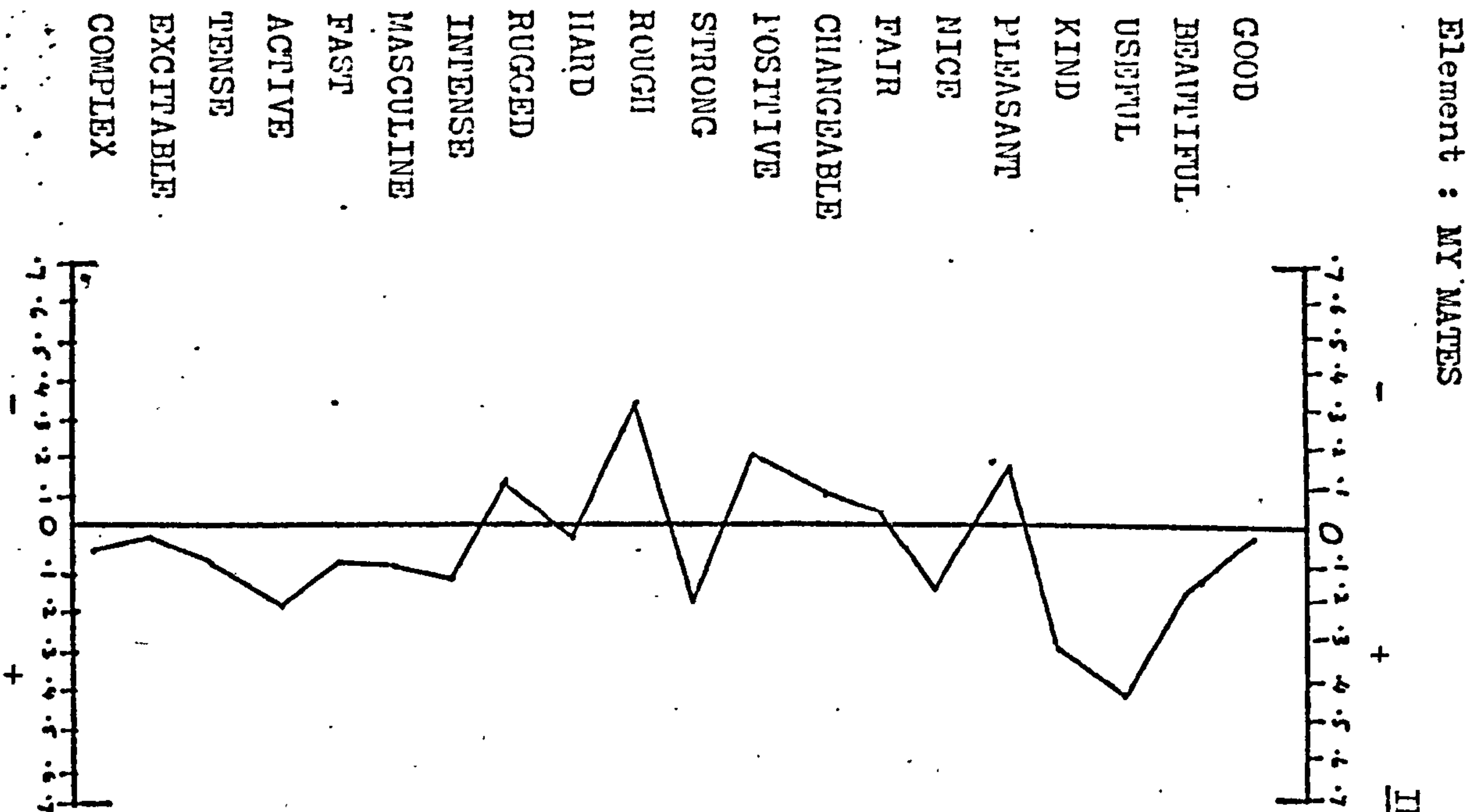
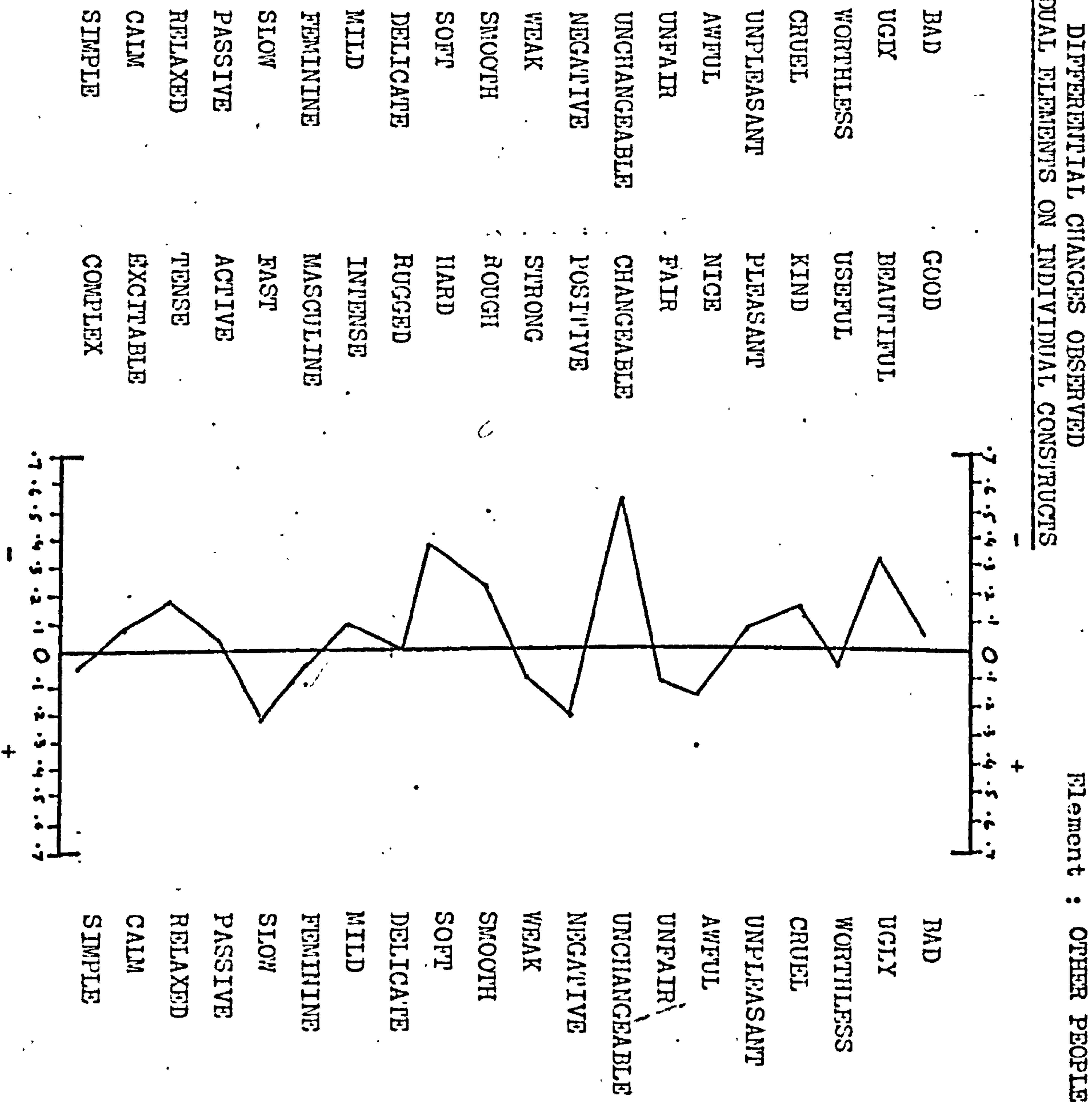


FIG. 10.18



Element : WORK

FIG. 10.19

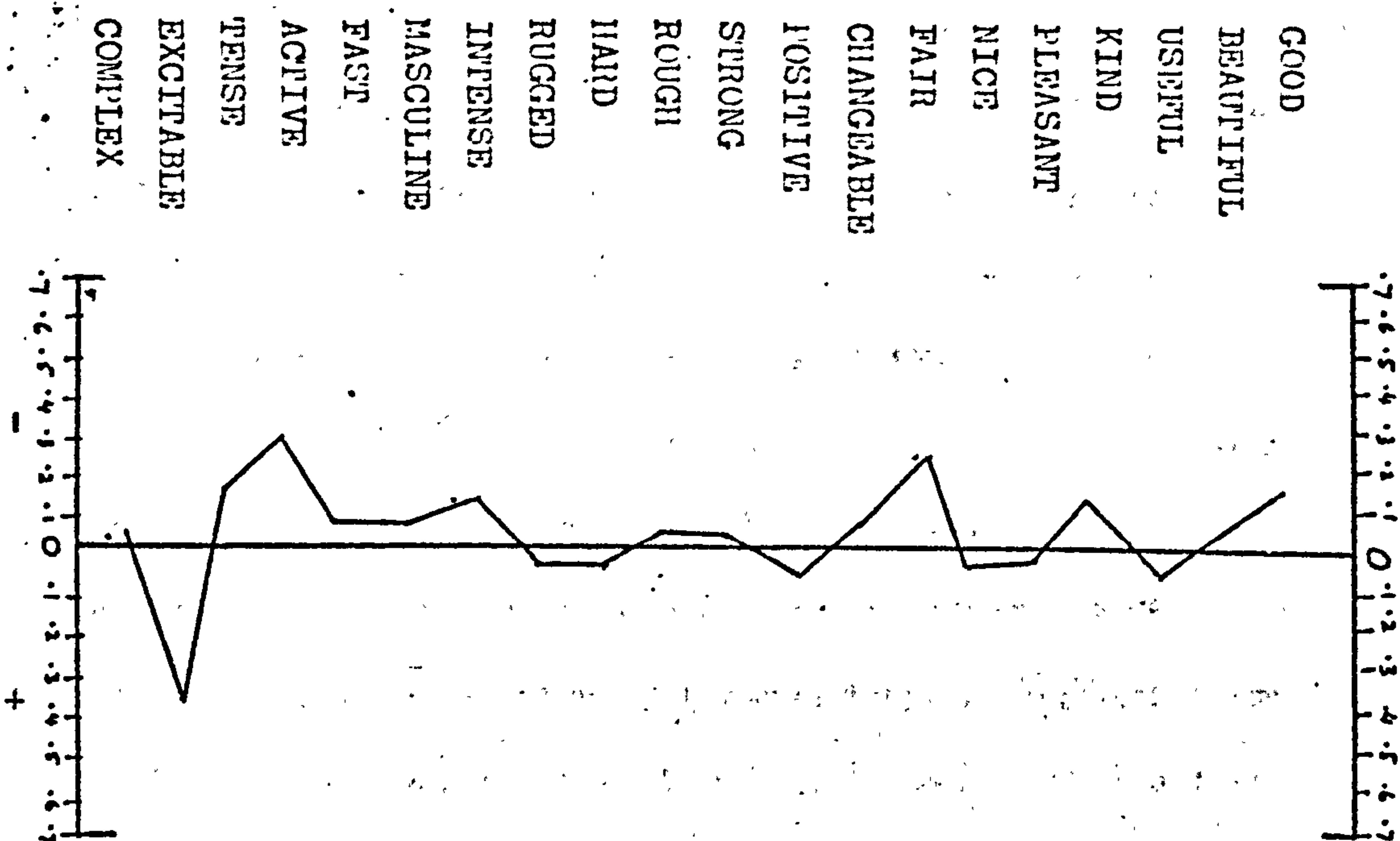
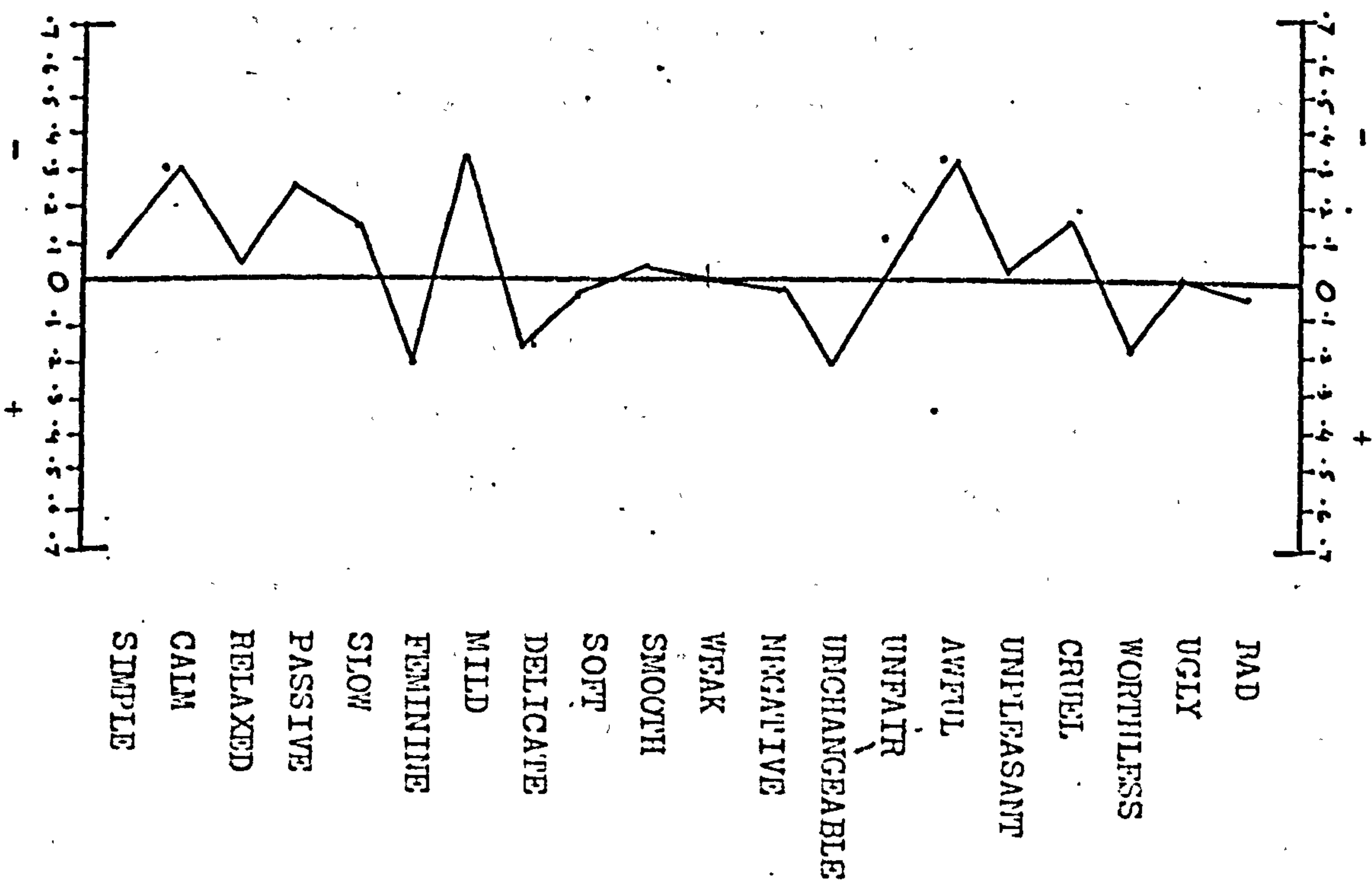
DIFFERENTIAL CHANGES OBSERVED
INDIVIDUAL ELEMENTS ON INDIVIDUAL CONSTRUCTS

FIG. 10.20

Element : LIFE OUTSIDE



totalled nearly 80% of the observed variance. The method of assessing the significance of the difference between two grids has been described in Chapter VII. For the difference between two grids of twenty Elements and twenty Constructs to be significant, the minimum variance accounted for by the first component should be 17.40% (S.D. 4.80).

The orientation of the variance observed is given by the construct and element loadings (Tables 10.4, 10.5). Information of psychological interest may also be contained in other components and these can not be automatically excluded because they account for a small proportion of the observed variation. The amount covered by the first two components is more than could have been expected if this ranking had been made at random ($p < .01$). The amount covered by the other four components is very small. However, they are being considered in order to allow for the limitations of the construct system.

X (3) THE ELEMENTS, CHANGES OBSERVED

In this section, changes observed in the ratings of elements will be presented (Table 10.2) followed by a more detailed presentation of changes in elements with reference to the Grid of Differential Changes (Table 10.3 and Figs. 10.1 to 10.20).

X (3) (i) Elements, Overall Changes (Table 10.2)

The Elements with the greatest sum of squares are the ones which show the largest changes. A large entry in the column Total for an Element indicates according to the sign that it is consistently "up-rated" or "down-rated" ~~on most of the~~ constructs. If an Element is rated differentially higher in second testing (B) than in first testing, its entry is positive, and it also shows that the Element has been "up-rated". The "up-rating" or "down-rating" of an Element shows the overall direction in which the changes have occurred in the use of the bipolar constructs. These changes on each individual construct will be seen/

seen in detail when changes in the individual elements will be examined (See Chapter X (3) (ii). A negative sign preceding the Total shows that the differential change has occurred towards the first adjective of the bi-polar construct, e.g. towards Good, in the Good (1) - Bad (7) construct. A positive sign shows the change to the second of the bi-polar constructs, e.g. Awful, in Nice (1) - Awful (7) construct. A small entry may indicate either no change at all or change in both directions for different constructs.

In the overall "consensus" analysis carried out (for all subjects on the differential changes in the ratings) the elements which have the largest sum of squares are as follows:

<u>Elements</u>	<u>Overall Differential Rating</u>
a) Aggression	Up-rated
b) Borstal Training	Down-rated
c) Discipline	Down-rated
d) Self	Up-rated
e) Father	Dubious
f) Mother	Dubious
g) Excitement	Down-rated
h) Love	Down-rated

Other elements that show a small change but rated consistently in one direction are as shown by a high total and small sum of squares.

a) My Offence	Up-rated
b) Guilty Feelings	Up-rated
c) Prison Officers	Up-rated
d) Family	Up-rated
e) My Mates	Up-rated

The above summary shows the amount and direction of overall shift in the two ratings of the Elements. (See Table 10.2 p231)

On/

On the whole, the group up-rates the elements - Aggression, Self, and the elements like Borstal Training, Discipline, Excitement and Love are now down-rated. In the case of elements - Father and Mother, changes have occurred in both directions.

Other elements, e.g. My Offence, Guilty Feelings, Prison Officers are consistently up-rated but the overall change does not seem to be large.

There are seven elements which do not seem to have apparently changed, either in the amount or in direction. These elements are Ideal Self, Police, Law, Sex and Other People. Work and Life Outside.

A close look on the individual elements, as shown by the Grid of Differential Changes (Table 10.3) will indicate the changes in the ratings of each of the elements on each construct.

X (3) (ii) Elements

From the Table 10.2 one could more fully look into the amount and direction of change produced for a given element on various constructs and such changes can also be represented in graphical form and the meanings of such changes can be interpreted. The following is an account of the changes observed of the ratings of elements.

a) Self Sum of Squares = 1.550 Total + 3.034 (Fig. 10.1)

This element is predominantly up-rated. The concept of Self for the group seems to have deteriorated in many respects. They see themselves as Bad, Ugly, Worthless, Negative, Weak, Smooth, Soft and Slow, Passive, Tense and Simple. Borstal sentence, and training seem to have affected their concept of Self in an adverse manner. They seem to see themselves as more vulnerable, weak and worthless.

b)/

- b) Ideal Self Sum of Squares = .649 Total -.522 (Fig. 10.2)

The element does not seem to have changed a great deal, only a small change towards the constructs like Pleasant, Nice, Fair and Excitable, is observed.

- c) Father Sum of Squares = 1.178 Total -.579 (Fig. 10.3)

The element shows a large change but a small total indicates that changes have occurred in both directions. The constructs showing salient changes are Good, Beautiful, Nice, Strong, Rugged and Masculine. They also rate this element as Smooth, Mild, Passive and Complex, and Relaxed and Not Useful. There seems to be a great deal of ambivalence and inconsistency in their concept of Father. One could summarise that the ratings are indicative of their confusion with regard to this element.

- d) Mother Sum of Squares = 1.166 Total -.735 (Fig. 10.4)

The large changes appear to have occurred in both directions. Mother is now rated positively on the majority of constructs. The most striking features are Smooth, Soft and Delicate and as opposed to the element, Father, she is more Active, Fast and Complex. It seems that the group is more concerned with the feminine qualities of Mother. She also seems to be the idealised figure the outward feel of which appears to be more important (Smooth, Soft, Delicate and Mild). In spite of her qualities, she plays a more active role in their lives. It seems that the group is quite aware of the complexity of the image, which, perhaps is unexplored below the conscious level.

- e) Family Sum of Squares = .857 Total +1.314 (Fig. 10.5)

Family has been consistently up-rated and the shift has been more marked towards constructs like Passive, Mild and Soft, with a slight shift towards the construct Strong.

f)/

- f) Discipline Sum of Squares = 1.651 Total -2.505 (Fig. 10.6)

This element shows a large change and the change seems to have occurred mainly in the down-rated direction. It is now considered to be as Good, Useful, Positive, Strong etc. The group does not consider Discipline as something bad and resentful. Delinquents are regarded as anti-discipline and anti-authority. However, in terms of change, it seems that they consider it useful, they respect it, for discipline provides structure through defining reality. Many delinquents, due to broken families, parental loss and lack of consistency in training may begin to resent attempts to control their behaviour and may rebel against it, and in the process they may lose their sense of reality. It seems that such a loss is felt and even though discipline is "Unpleasant" and "Ugly", yet they regard it as useful.

- g) Police Sum of Squares = .916 Total +.094 (Fig. 10.7)

Small and dubious change is observed on different constructs. They are judged more unfavourably on the one hand, but are also seen as more dynamic, on the other.

- h) Law Sum of Squares = .458 Total -.072 (Fig. 10.8)

It appears to be a relatively unimportant element and appears to have changed very little, and only slightly more favourably rated, as shown by a marked shift towards the construct Good, and a moderate shift towards Active and Beautiful.

- i) Prison Officers Sum of Squares = .562 Total +1.953 (Fig. 10.9)

This element is consistently up-rated. The change has been marked towards constructs like Weak, Passive, Relaxed, Calm and Unfair.

- j) Aggression Sum of Squares = 2.420 Total +1.323 (Fig. 10.10)

This element shows the largest amount of change and it has been up-rated/

downrated. Plotting the differential changes on the constructs (Fig. 10.10) shows that, on re-testing, it is now rated towards Bad, Ugly, Worthless, Unpleasant, Awful, Unfair and so on. This would seem to be a welcome change in the ratings of delinquents, a large proportion of whom may have been aggressive at one time or another. Aggression is also seen as an important part of the delinquent sub-culture. It is considered a sign of assertiveness, success and masculine strength. Now it seems that the group does not consider aggression as something strong, and a masculine attribute.

k) Love Sum of Squares = 1.042 Total -1.717 (Fig. 10.11)

A reasonably large change is observed, which has occurred consistently in one direction. On the whole, Love is seen as a Good, Beautiful, Pleasant and Nice, and an emotion which is tender (Soft and Delicate).

l) Excitement Sum of Squares=1.138 Total -2.483 (Fig. 10.12)

The change in this element is large and consistently in one direction. Excitement is Good, Beautiful, Useful, Pleasant, Nice and Intense etc. Excitement is pleasing and the group seems to be looking forward to it. After institutionalisation for a period of time, new experiences are pleasant and concomitant. Emotional experience is eagerly awaited.

m. Guilty Feelings Sum of Squares = .999 Total +1.928 (Fig. 10.13)

The changes in this element have occurred in one direction. Guilty Feelings are now Bad, Unpleasant, Awful, Weak, Soft, Intense and Passive. Yet, these are considered to be something useful. There appears to be a greater awareness of such feelings. The sense of personal responsibility and conscience appears to be stronger now than it was before. Guilty Feelings, although perhaps seen as a sign of weakness, therefore result in a poor self image.

n) Sex Sum of Squares=.485 Total -.479 (Fig. 10.14)

This seems to have changed little, with only a slight overall shift towards/

towards constructs like Beautiful, Smooth, Masculine and Active.

- o) My Offence Sum of Squares = .687 Total +2.188 (Fig. 10.15)

The overall change in the rating of this element is not large, but it is interesting to note that the shift seems to have occurred only in one direction, i.e. it is up-rated. This is shown by a large total.

Borstal boys regard their respective offences, for which they served the sentences, as Bad, Ugly, Worthless, Awful, Weak and Tense. There does not seem to be any pride in having committed the offence. The offence is considered as a sign of Weakness and perhaps it is not a sign of masculinity any more. The Borstal Training seems to have produced such a change.

- p) Borstal Training Sum of Squares = 1.807 Total -1.620 (Fig. 10.16)

The changes in this element show that Borstal Training, on the one hand is regarded as Bad, Ugly, Unpleasant and Awful, and somewhat Cruel, but the group finds it useful and positive. Borstal Training is Hard, Rugged and Tense, yet relatively Simple and Mild. It seems that after having completed the training, the group, on the whole, has a more positive view of Borstal, and it is regarded as the bitter medicine that they have had, which, in short, is unpleasant, but useful.

- q) My Mates Sum of Squares = .610 Total +1.076 (Fig. 10.17)

On the whole, this element is up-rated. The shift is more marked towards constructs like Worthless, Cruel and Rough, Weak and Passive.

- r) Other People Sum of Squares = .778 Total -.764 (Fig. 10.18)

This is a slightly down-rated and less favoured element. This shift was marked towards the constructs Changeable, Negative, Hard, Rough and Beautiful.

- s) Work Sum of Squares = .392 Total -.765 (Fig. 10.19)

It/

TABLE 10.4

CONSTRUCTS LOADINGS ON PRINCIPAL COMPONENTS

<u>CONSTRUCTS</u>	<u>LOADINGS</u>		
	<u>COMPONENT</u>	<u>COMPONENT</u>	<u>COMPONENT</u>
	1	2	3
1. GOOD-BAD	.81	-.35	.05
2. BEAUTIFUL-UGLY	.80	.00	-.09
3. USEFUL-WORTHLESS	.51	-.63	-.31
4. KIND-CRUEL	.71	.08	-.27
5. PLEASANT-UNPLEASANT	.87	.19	-.10
6. NICE-AWFUL	.88	-.03	.07
7. FAIR-UNFAIR	.68	-.13	-.51
8. CHANGEABLE-UNCHANGEABLE	.13	.44	.54
9. POSITIVE-NEGATIVE	-.05	-.66	.12
10. STRONG-WEAK	.33	-.77	.19
11. ROUGH-SMOOTH	-.51	-.30	-.46
12. HARD-SOFT	-.44	-.63	-.02
13. RUGGED-DELICATE	-.60	-.57	.18
14. INTENSE-MILD	-.16	.48	-.39
15. MASCULINE-FEMININE	.02	-.58	.46
16. FAST-SLOW	.29	-.77	-.10
17. ACTIVE-PASSIVE	-.13	-.21	-.25
18. TENSE-RELAXED	-.57	-.02	-.56
19. EXCITABLE-CALM	.20	.35	-.23
20. COMPLEX-SIMPLE	.33	.28	.46

TABLE 10.4 (CONTD.)CONSTRUCTS LOADINGS ON PRINCIPAL COMPONENTS

<u>CONSTRUCTS</u>	<u>LOADINGS</u>		
	<u>COMPONENT</u>	<u>COMPONENT</u>	<u>COMPONENT</u>
	4	5	6
1. GOOD-BAD	-.04	.18	.29
2. BEAUTIFUL-UGLY	-.17	.37	.21
3. USEFUL-WORTHLESS	-.09	.02	.10
4. KIND-CRUEL	-.10	.18	-.11
5. PLEASANT-UNPLEASANT	-.10	.07	-.05
6. NICE-AWFUL	.11	-.01	-.16
7. FAIR-UNFAIR	.22	-.16	.00
8. CHANGEABLE-UNCHANGEABLE	-.28	-.05	.33
9. POSITIVE-NEGATIVE	-.03	-.38	.36
10. STRONG-WEAK	-.14	-.25	-.09
11. ROUGH-SMOOTH	-.13	-.06	.49
12. HARD-SOFT	-.43	.19	.18
13. RUGGED-DELICATE	.08	.19	.18
14. INTENSE-MILD	-.62	.21	-.00
15. MASCULINE-FEMININE	-.13	.16	-.37
16. FAST-SLOW	-.03	-.26	-.17
17. ACTIVE-PASSIVE	-.65	.10	-.40
18. TENSE-RELAXED	.03	-.25	-.09
19. EXCITABLE-CALM	-.26	-.67	.01
20. COMPLEX-SIMPLE	-.56	-.35	.06

TABLE 10.5

ELEMENTS LOADINGS ON PRINCIPAL COMPONENTS

<u>ELEMENT</u>	<u>LOADINGS</u>		
	<u>COMPONENT</u>	<u>COMPONENT</u>	<u>COMPONENT</u>
	1	2	3
1. SELF	.12	-.99	.19
2. IDEAL SELF	-.38	-.09	.27
3. FATHER	-.50	.23	-.80
4. MOTHER	-.67	-.29	-.23
5. FAMILY	-.07	.14	-.49
6. DISCIPLINE	-.34	1.10	.05
7. POLICE	.53	.49	-.16
8. LAW	-.12	.13	-.07
9. PRISON OFFICERS	.32	-.15	-.16
10. AGGRESSION	1.27	-.23	-.49
11. LOVE	-.90	-.01	.12
12. EXCITEMENT	-.74	-.29	.10
13. GUILTY FEELINGS	.55	-.19	.35
14. SEX	-.29	.13	.10
15. MY OFFENCE	.54	-.35	.11
16. BORSTAL TRAINING	.63	.95	.57
17. MY MATES	.30	-.07	-.11
18. OTHER PEOPLE	.04	-.31	.05
19. WORK	-.09	.08	.14
20. LIFE OUTSIDE	-.20	-.27	.45

TABLE 10.5 (CONTD)

ELEMENTS LOADINGS ON PRINCIPAL COMPONENTS

<u>ELEMENTS</u>	<u>LOADINGS</u>		
	<u>COMPONENT</u>	<u>COMPONENT</u>	<u>COMPONENT</u>
	4	5	6
1. SELF	-.54	-.03	.29
2. IDEAL SELF	-.22	.31	-.02
3. FATHER	-.04	-.23	.19
4. MOTHER	.20	.49	.11
5. FAMILY	-.57	.29	.01
6. DISCIPLINE	-.21	.12	-.22
7. POLICE	.15	-.15	.42
8. LAW	.07	-.31	-.16
9. PRISON OFFICERS	-.16	-.44	-.22
10. AGGRESSION	.54	.40	-.07
11. LOVE	.07	.06	-.04
12. EXCITEMENT	.45	-.00	-.23
13. GUILTY FEELINGS	-.27	-.06	-.20
14. SEX	.11	-.28	.35
15. MY OFFENCE	-.03	-.03	.18
16. BORSTAL TRAINING	.03	.15	.09
17. MY MATES	-.27	.10	-.42
18. OTHER PEOPLE	.31	-.33	-.33
19. WORK	.08	-.26	.14
20. LIFE OUTSIDE	.27	.20	.14

DISPERSION OF ELEMENTS LOADINGS AND RELEVANT CONSTRUCTS

COMPONENT: 1

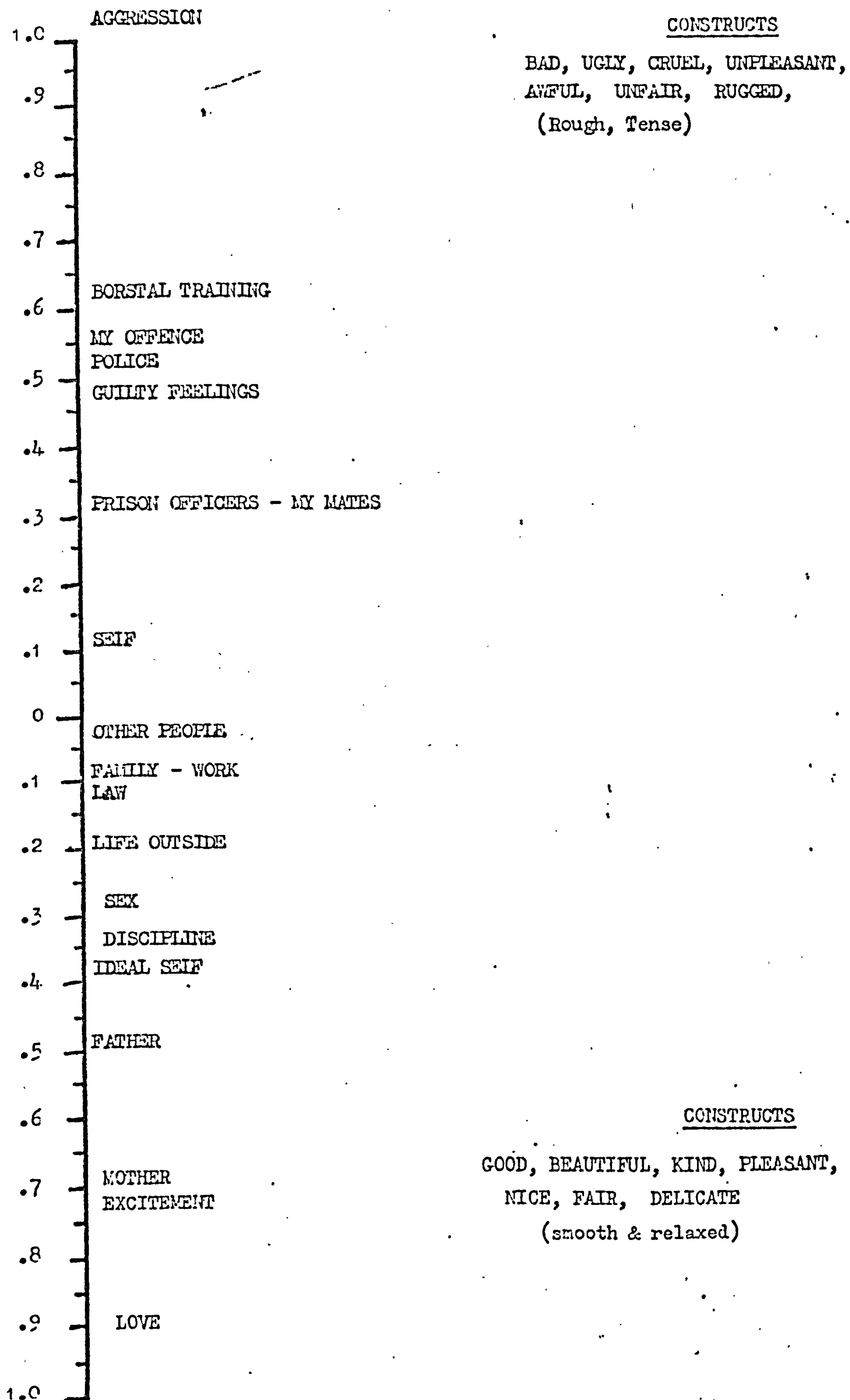


FIG: 10.22

DISPERSION OF ELEMENTS LOADINGS AND RELEVANT CONSTRUCTS

COMPONENT: 2

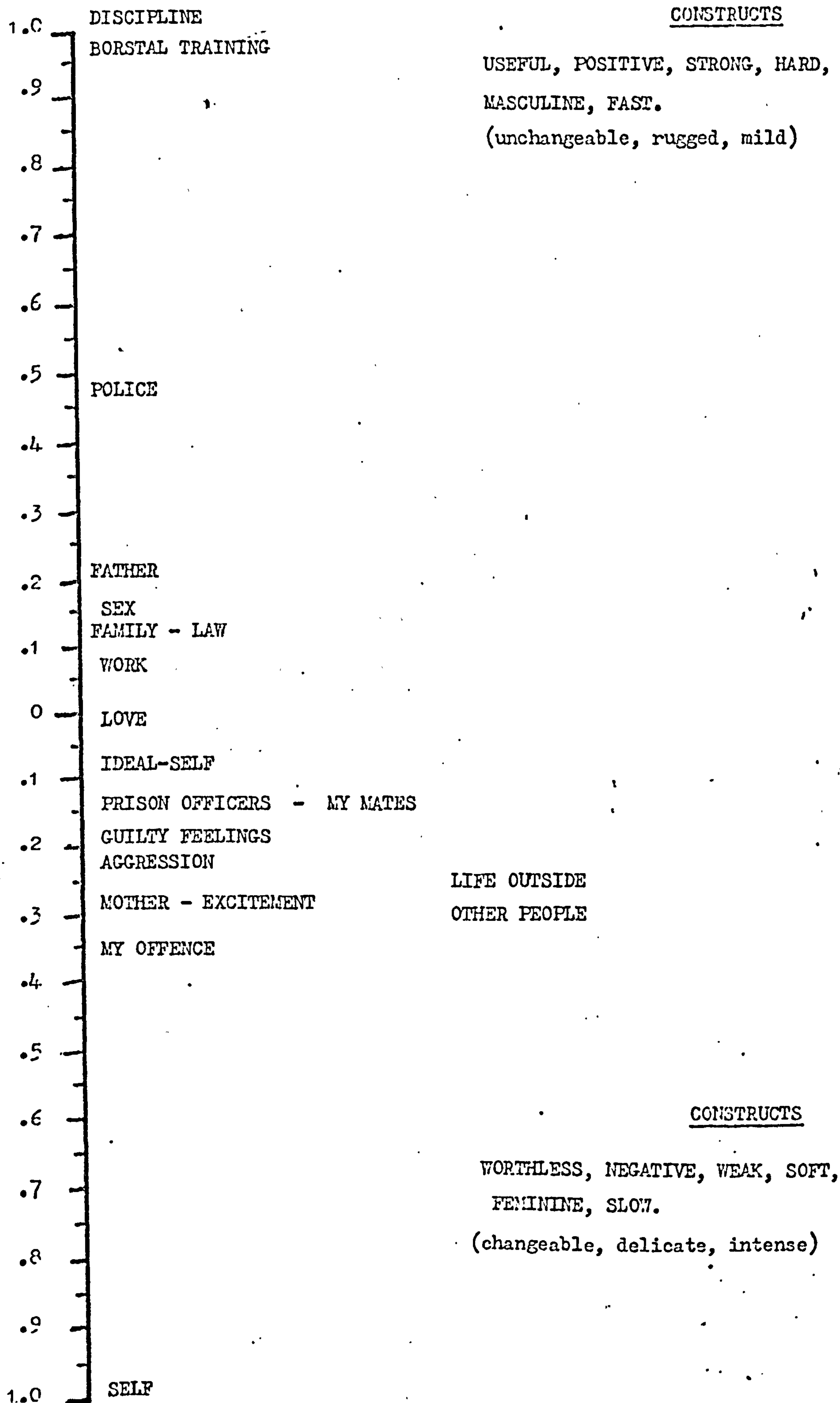


FIG: 10.23
DISPERSION OF ELEMENTS LOADINGS AND RELEVANT CONSTRUCTS

COMPONENT: 3

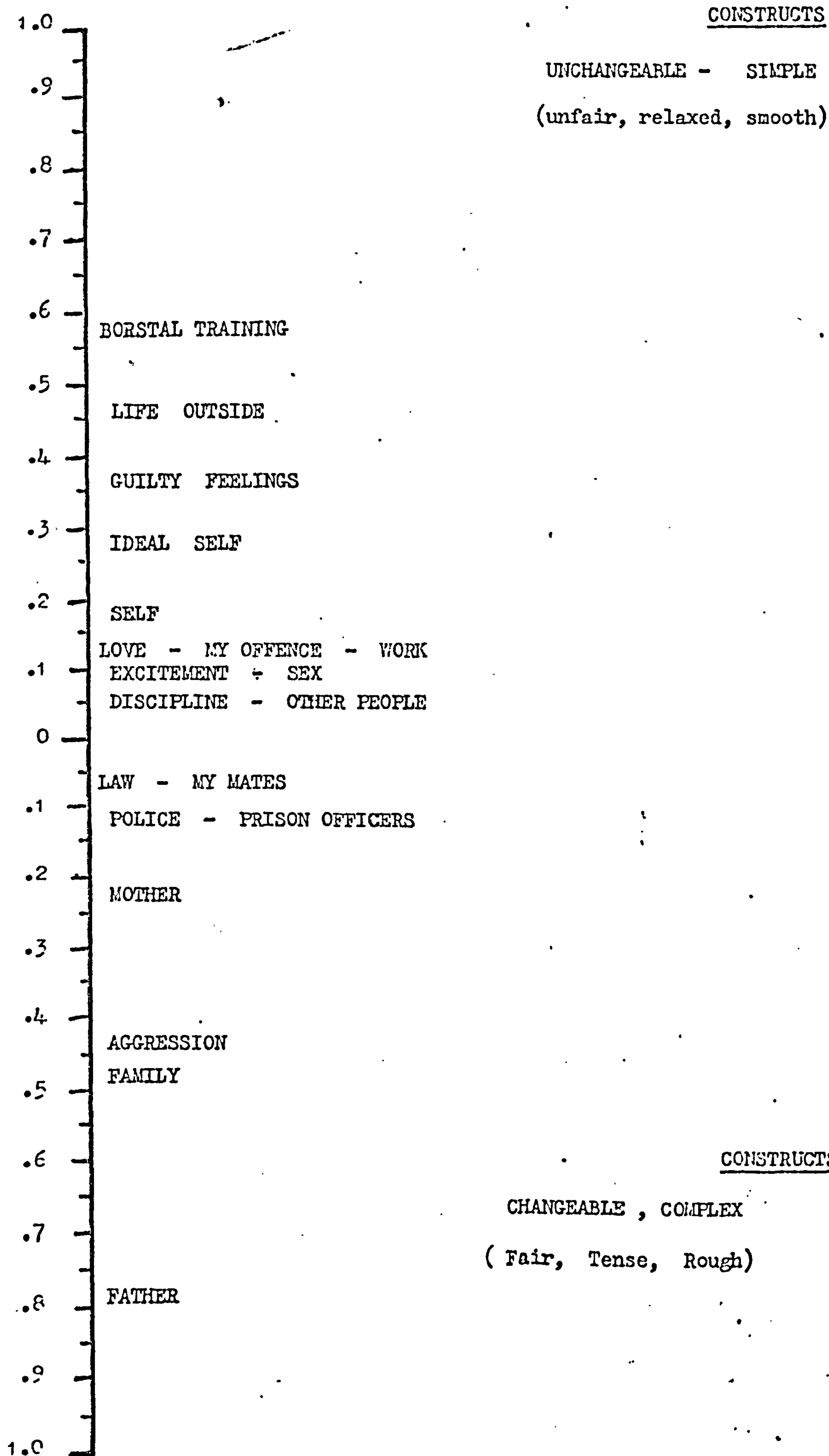


FIG: 10.24
DISPERSION OF ELEMENTS LOADINGS AND RELEVANT CONSTRUCTS

COMPONENT: 4

CONSTRUCTS

ACTIVE, COMPLEX, INTENSE
(Hard)

1.0
.9
.8
.7
.6
.5
.4
.3
.2
.1
0
.1
.2
.3
.4
.5
.6
.7
.8
.9
1.0

AGGRESSION

EXCITEMENT

OTHER PEOPLE
LIFE OUTSIDE

MOTHER

POLICE

SEX

LAW - LOVE - WORK

BORSTAL TRAINING

FATHER - MY OFFENCE

PRISON OFFICERS

IDEAL SELF - DISCIPLINE

GUILTY FEELINGS - MY MATES

SELF

FAMILY

CONSTRUCTS

PASSIVE, SIMPLE, MILD
(Soft)

FIG: 10.25
DISPERSION OF ELEMENTS LOADINGS AND RELEVANT CONSTRUCTS

COMPONENT: 5

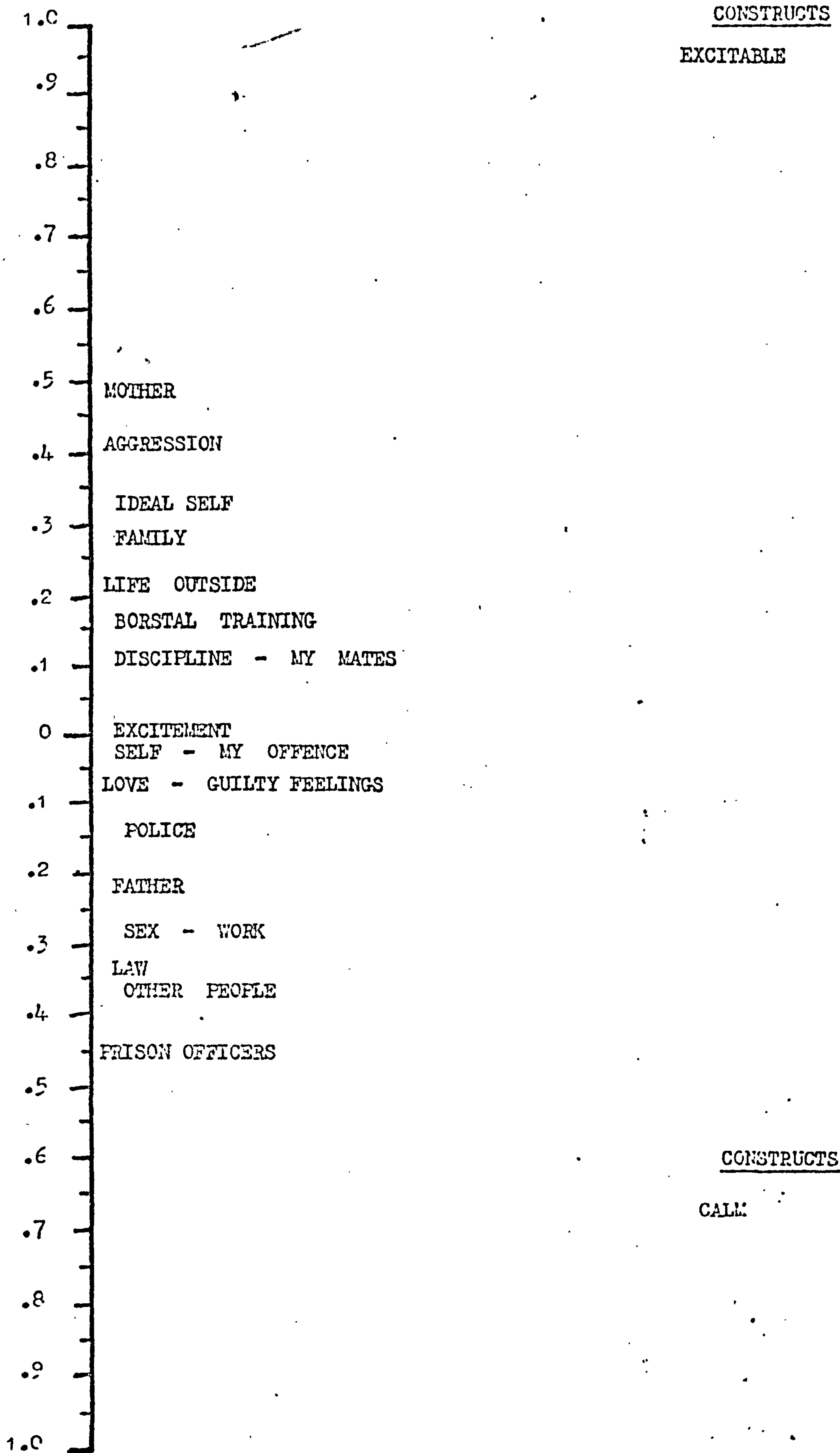
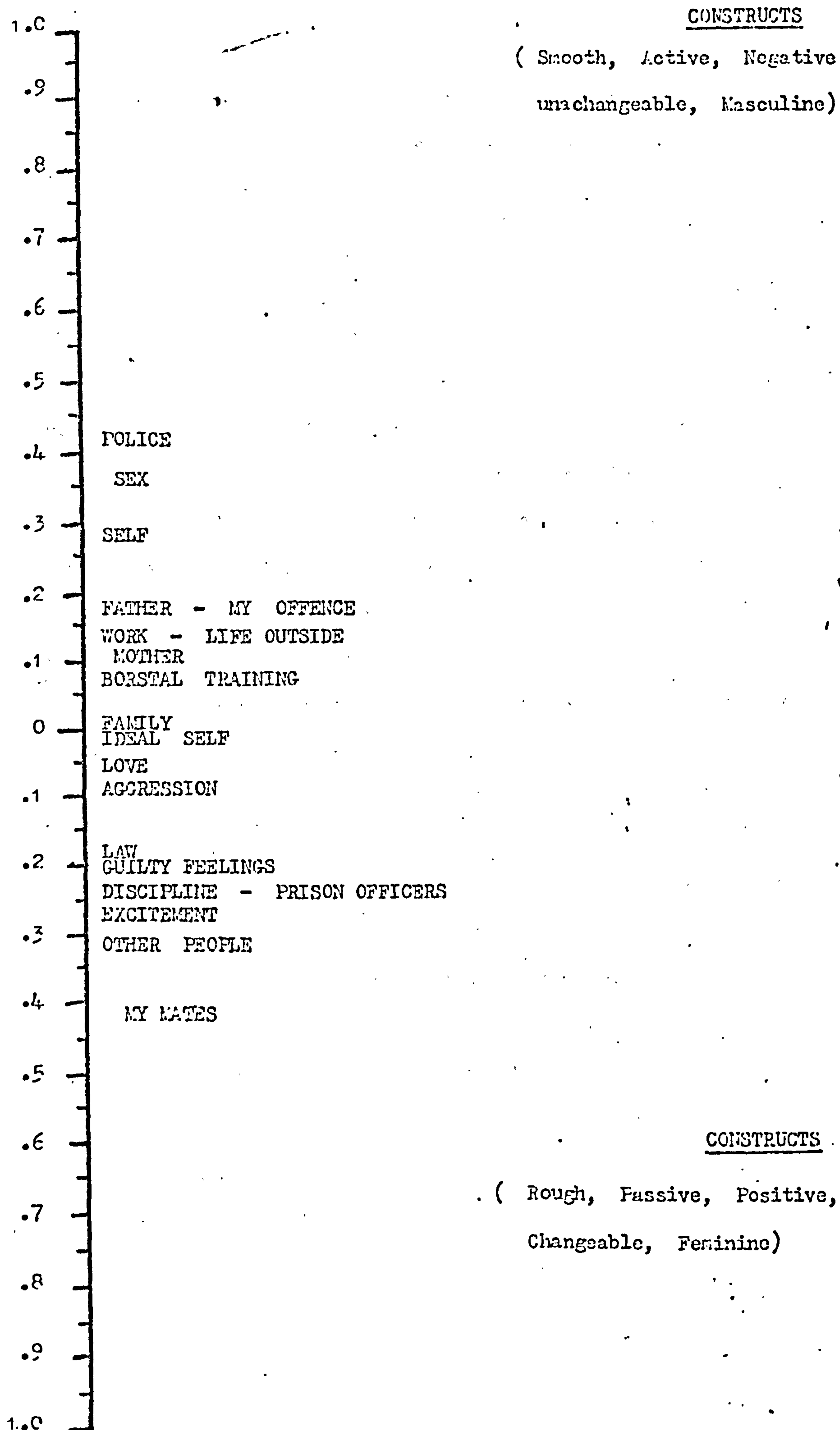


FIG: 10.26
DISPERSION OF ELEMENTS LOADINGS AND RELEVANT CONSTRUCTS

COMPONENT: 6



It appears to be the least important of all elements. Only a slight shift has occurred on constructs like Fair and Active.

t) Life Outside Sum of Squares = .655 Total = .668 (Fig. 10.21)

This is another slightly changed element. The shift occurred towards constructs like Nice, Intense, Active, Excitable, Changeable and Worthless.

X (4) PRINCIPAL COMPONENT ANALYSIS

The latent roots of the Principal Components and the proportion of variance accounted for by each component have been presented in section X (2). In this section, the first six of the components obtained by factor analysing the Grid of Differential Changes will be presented with reference to the factor loadings on each construct and each element (presented in Tables 10.4 and 10.5 respectively). An examination of the loadings of each construct and each element will reveal the way in which elements and constructs interact. The changes in loading from one component to another show that evaluation in terms of construct or element tends to coincide (positively or negatively) with evaluation in terms of the component. Slater suggests a method of graphic representation of the way constructs and elements interact. This interaction can be observed for each component separately. By plotting the elements according to their positive or negative loading and by placing constructs according to their positive or negative loadings on the same components, this relationship between the elements and constructs can be observed.

X (4) (i) Principal Components and Construct-Element Interaction

The following is an account of construct-element interaction in terms of differential change for each of the six components separately.

a) Component I

Fig. 10.21 represents the first component and the construct loadings indicate the direction of the axis in the construct space and the element /

element loadings as the position on it. The most striking feature of the figure is that the element Aggression (an important factor in juvenile delinquency and the emotional lives of the adolescents) seems to have undergone the greatest change. The construct which appears to have loadings on this component are Bad, Ugly, Cruel, Unpleasant, Awful, Unfair, Rough, Rugged and Tense. The change in this element has occurred towards the above mentioned constructs. The group seems to undervalue aggression as something that does not secure its purpose and they would dissociate themselves from it. The change is not only massive, but also in the right direction. Later, the implications and interpretations of this change will be discussed in the context of delinquency and in relation to other elements.

Similarly, Elements like Borstal Training, My Offence, The Police, Guilty feelings, have changed in the same direction. On the other hand, Love, Excitement, Mother and Father have moved towards constructs like Good, Beautiful, Kind, Pleasant, Fair, Smooth, Delicate and Nice. The response of the group towards these elements seems to be more favourable than before.

b) Component II

Fig. 10.22 deals with component II in the same way. The elements that stand out in one direction are Discipline, Borstal Training and the constructs associated with changes are Useful, Positive, Strong, Hard, Masculine, Fast, Excitable, etc. Contrary to what one could expect from the delinquent group, they seem to have a more favourable reaction to these elements. The usefulness of Discipline, which they would have experienced as an important part of Borstal Training, is appreciated, for it provided them with a more structured environment than they might have experienced within the family or the outside world. On the other hand, the element Self/

Self stands out, alone, as Worthless, Negative, Weak, Soft, Feminine, Slow, and so on. The self concept of the group has worsened.

Their self-image is poor and self esteem badly shattered

c) Component III

Fig. 10.23 shows that the element Father has moved towards the direction of Unchangeable and Complex. There seems to be a greater awareness of the inconsistencies and unpredictability of Father and the inability of the group to understand him for he may be too complex. This may have resulted in lack of structure and insecurity which provided by Borstal environment (Unchangeable and Simple), for this element is on the opposite end.

d) Component IV

Fig. 10.24 shows that this component deals with the dynamic and vitality aspects of their lives. Aggression and Excitement are both seen as forces that are Active, Complex and Intense. Such emotions are characteristic of the adolescent. However, elements like Self and Family are on the opposite end and the relevant constructs are Passive, Simple and Mild. The group's image of Self and Family lacks the characteristic force which may contribute to conflict and maladjustment in social settings.

e) Component V

On this component, the elements are dispersed along the Excitable-Calm dimension only (Fig. 10.25). The element Mother has shifted towards Excitable and Prison Officers are on the opposite end, i.e. Calm. The psychological significance of this component is not clear.

f) Component VI

The significance of this component is not very clear. As can be seen from Fig. 10.26, most of the elements are clustered together towards the middle, indicating little, if any, variation has occurred/

occurred along the corresponding constructs. The element, Police is seen as Smooth and Unchangeable and the element Mates is seen as Rough and Changeable. Moreover, Self is seen as in contrast to the peer group (Mates). The group tends to see their peer group as more Rough, Positive and Masculine than the Self.

V (4) (ii) Diagram Combining Both Sets of Results for the First two Components

Slater (1972) suggests combining the results obtained on the first two components to show the relation between the two dispersions on the plane of the first two components (the first one having the horizontal axis and the second one having the vertical axis). The plane is treated as a section of the component space within the construct-space and the elements being indicated by points and the constructs by directions.

The points for the elements are found by taking their loadings as co-ordinates. Similarities and differences between them are indicated by distances between them. In order to show the relations between the constructs, a circle with a convenient radius is drawn around this distribution with its centre at the origin. The loadings of the constructs define the axes crossing it and their opposite poles are shown projecting from the circumference. The present data is now represented according to the method described above, the first component having a horizontal plane with positive value to the right of the point of origin 0 and negative value to the left. The second component has a vertical plane, the positive values to the north of the point of origin 0 and the negative values to the south. The twenty elements are plotted along the axes defined by their loadings on the two components. The constructs are located around the outer circle, the axes of which are defined by their loadings.

Fig./

FIG: 10.27

COMPOSITE DIAGRAM:

TOTAL SAMPLE

RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS

ON

COMPONENTS I AND II

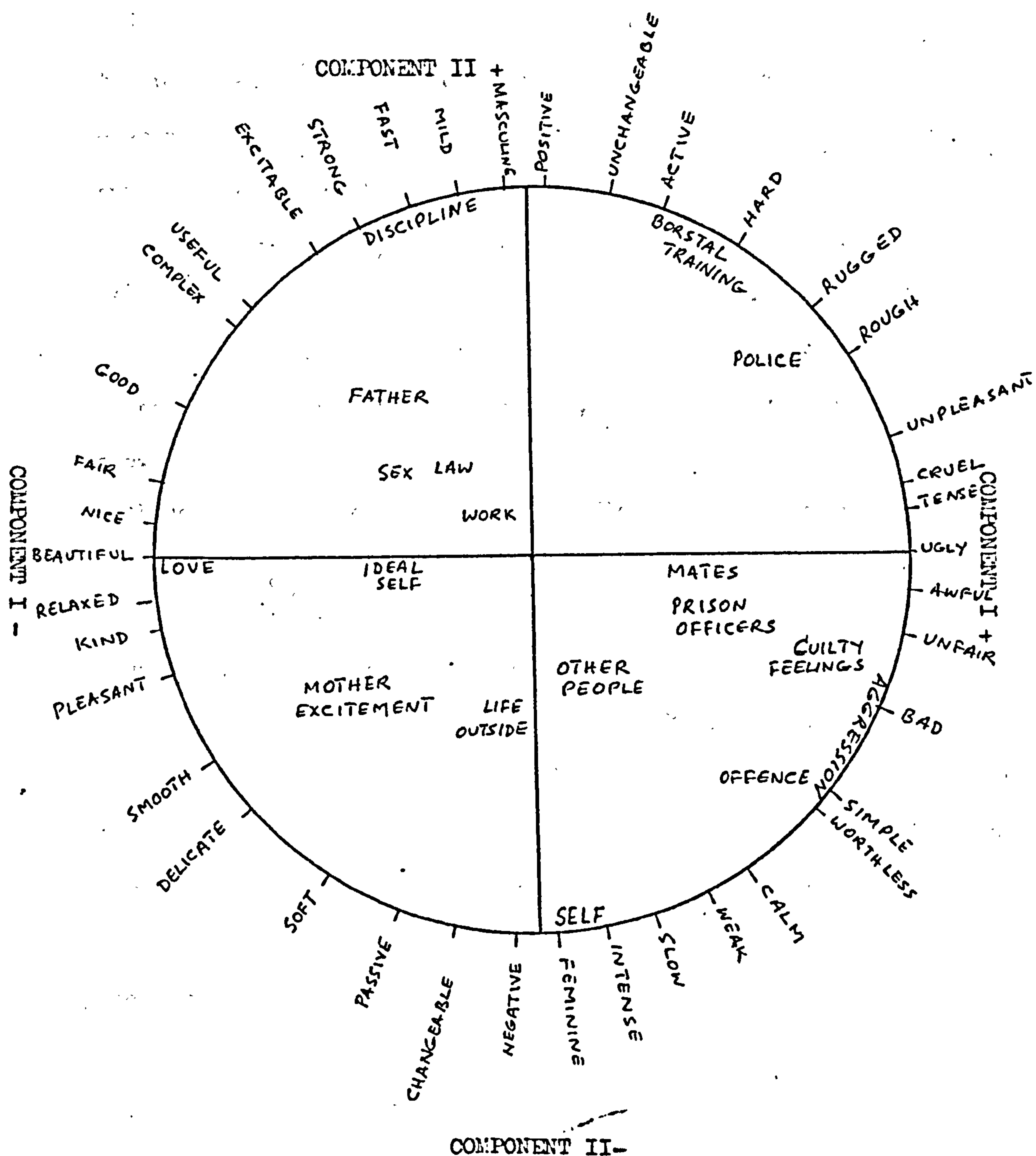


Fig. 10.27 shows the location of each of twenty elements and twenty constructs, according to their respective loadings on the first two components. The figure is also meaningful in terms of distance between elements, indicating their similarities and differences. The relationships between elements and constructs is shown by the physical proximity of an element with the nearest construct.

Approximately half of the items are located towards the centre of the origin of the two axes. The elements that stand out are the ones that are away from the centre and the closer an element to a construct, the more meaningful it becomes in terms of the change observed in the element. At a glance, it can be seen that the element Discipline is quite distant from the other elements and salient constructs relating to this element are (that it has moved differentially closer to constructs like) Masculine, Intense, Fast, Strong and Useful.

Borstal training, again an isolated element, is more closely associated with constructs like Hard, Simple, Active, Rugged, Excitable etc. On the band diagonally opposite to Discipline is the element Self, with constructs like Feminine, Mild, Slow, Weak, Worthless closely associated with it.

Love has a close association with constructs like Nice, Beautiful, Relaxed, Kind and Pleasant, while Aggression can be seen as very closely associated with being Bad, Unfair, Awful, Ugly etc.

Constructs like Pleasant, Kind, Relaxed, Beautiful, Nice, Fair and Good seem to have formed one cluster (with their opposites having the corresponding cluster on the other side). Similarly, other clusters are found by constructs like Hard, Simple, Active, Rugged, Excitable, Unchangeable and Intense, Fast and Strong.

In short, combining the result of the first two components does produce a useful summary of the two sets of results.

X (4) (iii) Other Measures

The programme output also produces several other measures of the relationship between constructs and among elements and between constructs and elements. Such relationships are presented in terms of correlations, angular distances, cosines, and through the polar co-ordinates of each construct and the position of elements projected on to them. In this presentation, the data regarding the above mentioned measures is omitted, primarily because the presentation is considered sufficient to illustrate the use of the method of analysis, and to elicit the most salient aspects of the changes between the two testings.

In the next section, an analysis of the psychological significance of changes is presented.

X (5) ANALYSIS AND SIGNIFICANCE OF CHANGES OBSERVED IN INDIVIDUAL ELEMENTS

The following is an account of the changes observed in the test re-test ratings and their psychological significance with special relevance to delinquency. These changes, observed in the ratings of all subjects on the twenty elements used in this study are discussed in terms of elements, loadings on the Principal Components and their relevant constructs, the relationship between elements and constructs as illustrated in the composite diagram and the differential changes on various constructs.

X (5) (i) Self and Ideal Self

The element, Self, shows a large change. The changes seem to have occurred consistently in one direction. The Principal Component analysis shows that this element has the highest negative loading on the second component. The constructs related to this component are (Fig.10.2) Worthless, Negative, Weak, Soft, Feminine, Slow, ^{and} Calm. This element is strongly contrasted with Discipline and Borstal Training which are considered Useful, Positive, Masculine, Strong and Fast. Self also has/

has a high loading on the fourth component, described by constructs like Passive, Simple and Mild. (Fig. 10.24)

On the composite diagram, Self features prominently by its distance from all other elements. The relevant constructs like Negative, Feminine, Mild, Slow, Weak, Worthless, Bad indicate a derogatory concept of the Self. It seems that the delinquents in this study see themselves ^{having become} as/weak and vulnerable. There appears to be a marked lack of self confidence and greater awareness of their own ineffectualness. Their own masculinity seems to be somewhat threatened. The masculine image that delinquents tended to present in their earlier behaviour seems to have crumbled. The diminished self esteem may be one of the effects of Borstal Training. The boys see themselves as "offenders" or delinquents having been subjected to punishment. They realise the futility of their behaviour in the past. This interpretation is supported by a large shift in the unfavourable direction on the element My Offence. They appear to have become more self-critical and self-rejecting. Looking at the constructs in which they now define themselves, a depressive affect can be seen. (Fig. 10.22)

The Grid of Differential Changes shows that salient changes that have occurred are towards Bad, Ugly, Worthless, Negative, Weak and Smooth, Soft, Feminine, Slow Passive and Simple. A moderate shift towards Kind, Pleasant, Nice and Fair can only be seen as an attempt by the boys to retain some of the self-esteem which would otherwise be totally lost. The construct Tense (down-rated) points to the possibility of an increase in anxiety, as it has been observed (Kaplan & Pakorny, 1969) that self-derogation is related to anxiety and depression. The affective state, that is shown by changes in the element Self, may be related to the nearness of the discharge date from the Borstal and link with the uncertainty they have about their ability to cope with the world/

world outside and their growing awareness of their own vulnerability.

The Ideal Self does not seem to have changed greatly. It shows a slight overall improvement, featuring on the first component. On the composite diagram, it seems that convergence between the Self and Ideal Self has, in fact, decreased even further, mainly due to a shift in the element Self towards being weaker than it was before. The Grid of Differential Changes shows Ideal Self as having shifted towards constructs like Pleasant, Nice, Fair, Strong and Excitable. On the whole, there seems to be little to compensate in the Ideal Self for what it has lost in self esteem. The Ideal Self remains somewhat Soft, Delicate, Mild, Feminine and Passive. Figs. 10.1 and 10.2 show both the Self and Ideal Self in their differential changes. The two graphs show a decrease in congruence between the two elements in terms of differential changes. The Self moves towards Bad and Ideal Self towards Good. Self has shifted towards Worthless and Ideal Self, Useful. There is a marked shift in the Self towards Weak, whereas Ideal Self shows a marked change towards Strong. On other constructs both elements have changed in the same direction. For example, both elements have moved towards Pleasant, Nice, Fair, Excitable and the Ideal Self appears to have changed more than the Self. On constructs like Negative, Soft, Feminine, the Self shows greater change than the Ideal Self.

x (5) (ii) Parental Elements: Mother and Father

The elements, Father and Mother appear to change, but the relatively small changes (discussed above) show that the shift has occurred in both directions of the bi-polar constructs. In the discussion of principal components it was noted that the element Father stands out on the third component and the constructs relevant to this element are Changeable and Complex. The Grid of Differential Changes shows that this element has changed more towards being Nice, Strong/

Strong, Rugged, Masculine on the one hand and more Smooth, Mild, Relaxed on the other. Furthermore, little change seems to have occurred on the construct Changeable and relatively larger change on the construct Complex. (Fig. 10.3).

The other parental element, Mother, also changes more or less in a similar way as the Father. However, the constructs on which this change seems to have occurred are Smooth, Fast, Active and Complex. Compared to Father, Mother on the whole, is judged as Fair, Nice, Good, Useful and Pleasant. Unlike Father, the Mother does not stand out on any of the principal components. It could be said that, psychologically she does not hold the same prominent position for the delinquent groups as the father does.

This element is also marked by constructs Changeable and Complex but not to the same degree as the paternal element. Mother is seen as having positive attributes and feminine qualities (Smooth, Soft Delicate and Feminine), but in contrast to the Father, she is seen as Fast and Active. It may be that the parental role of the mother is more dynamic and influential in the life of the delinquent, especially when the Father is seen as Passive and Slow.

X (5) (iii) Family

The element, Family, has shown a relatively small change (sum of Squares .857). However, the change has been consistently in one direction only (Total = +1.314). The distribution of elements on component 4 (Fig. 10.24) show that this element is placed prominently at the negative end. The constructs closest to this element are Passive, Simple and Mild. The element Self, on this component appears very close to the same end, related to the same constructs. This may indicate the similarity the groups perceived between themselves and their families in terms of passivity and ineffectualness.

Moreover/

Moreover, the two dimensional distributions of the first and second components show the element, on the whole, closer to the element Father than Mother. This observation may reflect the overall importance of the father's role, as the head and authority, who seems now to have become the psychologically more important factor, (Fig. 10.27). Element loadings on component 2 show that Father, more than Mother, is closely related to constructs denoting masculine authority and strength as well as utility. The Grid of Differential Changes shows that the Family, whatever it stands for, is now seen as Ugly, Cruel and Unpleasant. It is Nice, but Unfair, Changeable, Strong, and Smooth, Mild and Masculine. (Changes on such constructs have a striking similarity to the changes on the element Father). The family is now seen as extremely Passive, more like Father than Mother. The similarity between Family and Mother is seen on the constructs Smooth, Soft and Fast.

The above observations indicate that, on the whole the emotional experience of the group with regard to the Family is not a happy one. Family is seen in many ways as similar to its head, the Father, who, despite being the authority figure, fails in his role. The Family is perceived as extremely Passive, which may reflect a wish that it had exercised a more active role in their lives. The similarity of Family to Mother is negligible. These results appear to be in line with Andry's findings.

X (5) (iv) Discipline

The element, Discipline, has shown one of the largest changes that occurred (Total = -2.50). This change seems to have been predominantly in one direction. There are some indications (high Sum of Squares = 1.651) that, on some of the grids, the change has also occurred in the opposite direction.

Principal Component analysis shows that on the first component
Discipline/

Discipline has, on the whole, acquired a favourable shift towards constructs like Good, Beautiful, Kind, Pleasant, Nice and so on (Fig. 10.21) ^{which} which have the highest loading on this component. The constructs most relevant on this component are Useful, Positive, Strong, Hard, Masculine and Fast (and the Borstal Training, through which discipline has been most recently experienced, is the only element positionally close to it). It could mean that the Borstal Boys' ratings of Discipline have changed in a more positive direction. Discipline is now recognised as something Useful, Strong, Masculine, Hard, Fast and Excitable. Discipline here may not be represented by any one person or persons, it may be seen as the definable and predictable aspect of the environment (the sum of experiences in Borstal Training).

Perhaps erratic discipline generates anxiety, uncertainty and insecurity, which results in it being disliked and disregarded by the delinquent, not because it is a mode of control over their behaviour, but because of its inconsistency. The composite diagram showing elements in the construct space on the first two components shows that the element, Discipline, stands well away from the rest and the constructs nearest to it are Masculine, Politive, Intense, Fast, Strong and Unchangeable. It may be due to the latter attribute of this element that now Discipline is regarded as something Useful, Good and Fair, Positive, Strong and so on, (Fig. 10.6).

The Grid of Differential Changes shows large changes have occurred towards Good, Useful, Positive, Strong, Mild and Fast, Calm and Simple. Discipline is no longer regarded as something bad. It may be Ugly, but it is Useful. They may not respect authority as such, but the group has learned to respect Discipline, for its favourable attributes have now been recognised and acknowledged.

X (5) (v) The Pplice/

X (5) (v) The Police

The Borstal boys in the present study showed little change in the test-retest ratings on the element Police. The principal Component Analysis (Fig.10.20) shows that this element has the highest loading on the first component and the constructs related to this element are generally unfavourable. They are: Bad, Ugly, Unpleasant, Awful, Unfair and Rough. On the second component, the element also has a high loading and the relevant constructs on this component are: Useful, Positive, Strong, Hard and Masculine. The composite diagram shows that, like Discipline and Borstal Training, this element is judged to be unfavourable and unpleasant, at the same time as it is considered as Useful, Strong, Active, Masculine and Hard (Fig. 10.27) - a symbol of manliness, authority, power and importance.

The Grid of Differential Changes shows these shifts on individual constructs. The element has shifted more towards the unfavourable poles, like Bad, Ugly, Cruel, Unpleasant, Awful, and Unfair on the one hand, and towards Strong Hard, Rugged, Masculine, Fast and Active on the other. The results are similar to the findings by White & Porter (1970). The Police are still seen as unfavourable and threatening, but also powerful and vigilant, authority which is also useful and necessary to maintain law and order.

X (5) (vi) The Law

On the whole, the element Law seems to have changed the least. This element does not have a high loading on any of the six Principal Components. It seems that, Psychologically, this element is not important for the Borstal boys. The Grid of Differential Changes shows this element to have had a large change on six of the twenty constructs used. The Law has differentially moved towards Good, Beautiful, Cruel, Active, Relaxed and Calm. On the rest of the constructs, the changes are minimal. (Fig. 10.8).

X (5) (vii)/

X (5) (vii) Prison Officers

This element has changed, more or less consistently, in the up-rated direction. On the first component, this element has a high loading, and it is described by constructs like Bad, Ugly, Cruel, Unpleasant, Awful, Unfair and so on. On the fifth component (Fig.10.25) the element has a high negative loading and it is described by the construct Calm. It may be that Prison Officers are seen as unresponsive and lacking in emotional understanding. The composite diagram shows that Prison Officers and Mates are seen as very similar to each other, for they constitute the social reality within the Borstal. Prison Officers are not regarded as the effective authority figures that the delinquents might respect. The Grid of Differential Changes shows that the Prison Officers are now seen as more Worthless, Unfair and especially Weak. They are also more Passive, Relaxed and Calm. It seems that the Prison Officers failed to present an image of an authority figure that might be considered as Useful and Strong, or even friendly. They are dissociated from Borstal Training or Discipline and therefore the 'authority' role of which they are meant to be representatives, within the Borstal setting.

X (5) (viii) Aggression

The element "Aggression" appears to be the most important of all elements. It accounts for the largest amount of variance (12.10%). The Sum of Squares is also the largest, denoting that it has changed more than any other element. This element (Fig. 10.21) has the highest loading at one extreme of the first component. The constructs associated with this component on the positive side are: Bad, Ugly, Cruel, Unpleasant, Awful, Unfair, Rough, Rugged and Tense. This element has moved towards the constructs mentioned above. On the second component it has moved towards: Worthless, Negative, Weak, Soft/

Soft, Feminine, etc. However, the shift on the second component is not as marked as on the first one. The third component distribution is towards: Changeable and Complex and a close association with the element Family. On the fourth component it again stands out towards Active, Complex and Intense, and it appears close to the element Excitement.

Fig. 10.27 represents the location of elements in the construct space by superimposing components one and two. The element Aggression once again stands out from the rest and is closely associated with the constructs: Unpleasant, Cruel, Tense, Ugly, Awful, Bad, Worthless, Weak etc.

It seems that this element is psychologically the most important. The amount and the direction of change on this element are critical, for it would be a move in a controlled direction. The Grid of Differential Change shows the constructs on which the shift has mainly occurred. Fig. 10.10 shows that the largest changes have taken place towards: Bad, Ugly, Worthless, Cruel, Unpleasant, Awful and Unfair. Although most of the delinquents in this sample, as in other studies, have been aggressive at one time or another and acted out their hostile impulses, they do not regard this as something "good" any more. Aggressiveness is an approved mode of behaviour for the delinquents and they are supposed not to have remorse about such behaviour. However it seems that they do not condone, any longer, their characteristic manner of reacting. It has also become Changeable and Complex, dimensions already discussed above. Aggression generates inconsistency.

The group perceives aggression as more Rough and Hard, perhaps an indication of their own masculinity and self-assertiveness. They seem to have become more aware of the emotional aspects of aggression and see it as more Intense, Active and Excitable. Therefore, on the one/

one hand Aggression is considered as something Bad, while on the other hand they seem to have become more aware of its intensity. Aggression, with regard to its changeability and complexity seems closest to the element Family, and in terms of emotionality (Active and Intense) it is closest to the element Excitement. The above observations denote that there may be a psychological relationship between Aggression and Family, and Aggression and Excitement, on the dimensions mentioned above.

Aggressiveness is clearly still highly valued, but difficulties in its appropriate expression create anxiety and uncertainty.

X (5) (ix) Love

The test-retest differences on the element Love are large, and on the whole, it has been up-rated. This element has the highest negative loading on the first component. The constructs relevant to this element are: Good, Beautiful, Kind, Pleasant, Nice, Fair Smooth, Delicate and Relaxed. Love, on this component, is close to Excitement and Mother, but at quite the opposite end to Aggression. Love appears to have received a more favourable evaluation, and it seems to be unimportant on other components. Perhaps the main function and the purpose of Love is that it is a favourable and desirable emotion with which the delinquents would prefer to interact in their social and personal relationships. But, how such relationships are to be conducted is unclear.

The composite diagram shows that Love is close to Excitement and Mother, and it is seen as, perhaps, the other side of the coin to Aggression. The Grid of Differential Changes shows that this element has differentially shifted towards Good, Beautiful, Useful, Kind, Pleasant, Nice and Fast. The gentle and subtle aspects of Love are denoted by shifts towards constructs like Soft, Delicate, Relaxed and Excitable.

X (5) (x) Excitement

X (5) (x) Excitement

This element has changed considerably. Differentially, it has been consistently down-rated. Excitement has a high loading on the first component, denoted by constructs like: Good, Beautiful, Kind, Pleasant, Nice, Smooth, Delicate and Relaxed. (Fig 10.21) on this component, this element has a loading similar to Mother and it occurs close to elements like Love and Father, and in direct contrast to Aggression. Excitement is a highly valued emotional experience it would appear, in relation to Father and Mother. On the second component, it has the same loading as Mother, Life Outside, and Other People. The relevant constructs are: Worthless, Negative, Weak, Soft, Feminine, Slow and Calm. It would appear that such constructs express frustration experienced in interpersonal relationships, particularly with parents.

On the fourth component, Excitement has a high loading (Fig 10.24) and it occurs close to the element, Aggression. The relevant constructs are Active, Complex and Intense. Excitement is seen in direct contrast to Self and Family (Passive, Simple and Mild). It seems that Excitement, as a desirable experience is also seen as a strong motivating force, the impact of which is deeply felt, but perhaps due to frustration it causes in interpersonal relationships, it is too complex to be understood. In terms of arousal of emotions, Excitement and Aggression are felt as similar affective experiences.

The Grid of Differential Changes shows that this element has shifted, particularly towards constructs like Good, Beautiful, Useful, Kind, Pleasant, Nice, Changeable, Delicate, Intense, Slow, Passive, Excitable, and Complex. Excitement is a highly valued and strong, excitable emotional experience, which, at the same time, is Delicate and Passive while being Changeable and Complex. (Fig. 10.12).

X (5) (xi) Guilty Feelings/

X (5) (xi) Guilty Feelings

The purpose of including the element, Guilty Feelings, in this study is twofold: Firstly, to assess, by the changes in the ratings of this element, the importance and relevance of guilt in the sample of Borstal boys, for, if the guilt is absent in the group, or the element is irrelevant, there would be little or no significant changes in the ratings. On the other hand, if this element is important, what kind of changes ^d to occur?. Since the present sample, as described above consists mainly of "psychiatrically disturbed" delinquent boys, it was assumed that this element would be of importance in this study.

Secondly, this element was included to assess the relationship of guilt to other elements pertaining to delinquent behaviour, e.g. My Offence, Aggression, etc. This will be discussed in detail in the final discussion of results.

The changes in the ratings of Guilty Feelings (as shown by the Sum of Squares .999 and the Total + 1,928) have been large and, on the whole, the element has been consistently up-rated. The principal component analysis shows that it has the largest loading on the first component denoted by constructs like: Bad, Ugly, Cruel, Unpleasant, Awful, Unfair, Rough, Rugged and Tense. It is also very close to elements like My Offence, Police and Borstal Training. On the second component, it has a low loading and it is denoted by constructs like Worthless, Negative, Weak and Soft. On this component it occurs close to the element Aggression. On the third component it has a high loading and it has shifted towards the Unchangeable and Simple pole. The composite diagram shows that it has now changed towards the negative side of the constructs. Guilty Feelings are now seen as more Unfair, Awful, Ugly, Tense, Cruel, Unpleasant and Bad, Worthless and Weak. It seems that, according to the changes observed, the group has become more aware of feelings of guilt and the prick of conscience/

conscience is felt more acutely, giving rise to more unpleasant feelings.

Psychologically, there seems to be a similarity between Guilty Feelings and My Offence, for these two elements exist close to each other. However, one cannot conclude that the guilt is necessarily associated with the offence. The Grid of Differential Changes shows that the shifts in the ratings have occurred mainly towards Bad, Awful, Weak, Soft, Rugged, Intense and Passive. They have also moved slightly towards being Useful and Tense. The most salient changes are that Guilt Feelings are now Awful and Unpleasant and that such feelings seem to have a debilitating effect, as shown by changes towards constructs like Weak, Soft and Passive. The intensity of such feelings seems to have increased, as shown by constructs like Rugged and Intense. On the whole, the group seems to have become more aware of its own sense of guilt. It is difficult to say, at this stage, precisely what has made the feelings more intense, or whether this guilt is the natural consequence of Borstal Training, on the so called "neurotic acting-out" type of delinquents. There seems to be a relationship with the element My Offence. One could postulate that Borstal Training (not seen as a form of punishment, but as a useful though unpleasant experience) could have left their crimes unpunished and therefore their feelings of guilt, not only unrelieved, but also more attenuated. Perhaps a detailed comparison between the ratings of elements My Offence, Guilty Feelings, Aggression etc., would be necessary to test the above hypothesis.

X (5) (xii) Sex

This element appears to have changed only slightly. Though it does not feature prominently on five of the six factor components, on the whole, Sex is now slightly more regarded as likeable. It has a high/

high loading on the sixth factor component, marked by constructs like Active, Masculine and Unchangeable. Fig. 10.14 shows that a shift in the differential rating of this element has also occurred on the construct Beautiful. It appears that it is seen more as an Active and potent force and a means of masculine self assertiveness.

X (5) (xiii) My Offence

This element was included in this study to investigate how the delinquent perceives his own offence, his punishment and corrective training, and whether, after receiving the training, his ratings on the constructs show any change. According to Table 10.2 this element shows a relatively small change. The high total shows that it has been consistently down-rated. On the first component this element has a relatively high loading and the relevant constructs are Bad, Ugly, Cruel, Unpleasant, Awful and Unfair. On the second component it has the highest loading after Self, and the relevant constructs are Worthless, Negative, Weak, Soft and Feminine. On both components this element, on the whole, is described by negative evaluation showing a derogatory attitude. This element does not have a high loading on the rest of the components.

The Grid of Differential Changes shows that the shift in the ratings has occurred towards the constructs Bad, Ugly, Worthless, Awful, Weak, Feminine and Slow. On the one hand this indicates a feeling of remorse about past delinquent behaviour and on the other hand the group sees the offence as more Active and Tense, yet not exciting. As My Offence has now changed towards being something Active, it is also considered as Tense, a construct which is clustered along with Bad, Ugly, Cruel, Awful etc. On the rest of the constructs, very little change seems to have occurred.

X (5) (xiv) Borstal Training/

X (5) (xiv) Borstal Training

This element's Sum of Squares (1.807) and the Total (-1.62) shows that it has changed considerably and, on the whole, the shift has occurred in one direction. The principal component analysis shows that this element has a high loading on the first three components. On the first component, the element has a very high loading (+.63) and only one other element has a higher loading on this component (i.e. Aggression). This element occurs close to elements like My Offence, the Police and Guilty Feelings. The constructs relevant to Borstal Training are Bad, Ugly, Cruel, Unpleasant, Awful, Unfair etc. It seems that, on the whole, the group resents Borstal Training, for it confines their freedom and subjects them to a regime which evokes negative feelings in them.

This element has the highest loading on the second component and it is very close to the element Discipline, which has already been discussed above. According to the constructs relevant to this component, Borstal Training, like Discipline, is seen as Useful, Positive, Strong, Hard, Masculine, Fast Excitable, etc. It seems that Borstal Training, which is the way discipline is imposed on them, though resented by the group, is also respected for its usefulness. Going through the rigours of training, it is thought to be Positive, Strong and Hard.

On the third component, this element has a higher loading on the positive side than any other element and the constructs most relevant to this element are Unchangeable and Simple. Again, Borstal Training provides structure and is Unchangeable; it is predictable therefore Simple and comprehensible. This element is seen in direct contrast to Father (which is situated on the opposite and extreme end of the negative pole). Father, who is traditionally the person who provides/

provides discipline and training in the early life (the importance of Father has been discussed above) and who has perhaps failed, is seen as Changeable and Complex. In other words, unpredictable, therefore, incomprehensible.

On components four-five and six, this element does not have a high loading and thus, on these components, it is not significant. The composite diagram shows that this element is among those that are psychologically the most important ones, and it features prominently away from most other elements. The relevant constructs are Hard, Simple, Active, Rugged, Excitable, Unchangeable, Positive etc. To sum up the changes in the ratings of this element, one can say that Borstal Training is regarded as the bitter medicine; it is unpleasant, but useful.

The Grid of Differential Changes shows the constructs on which the shift has mainly occurred. It is considered to be more Bad, Ugly and Unpleasant. Fig. 10.16 shows that the largest changes seem to have occurred in the direction of being more Useful, Hard, Tense, Rough and Strong. It seems that the impact of the experience on the Borstal boys has been quite strong. The strength of the regime, however unpleasant it might be, is respected and its usefulness is acknowledged.

X (5) (xv) Mates

The element Mates has undergone a small but consistent change towards the up-rated direction. This element has a moderate loading on the first component and it features alongside Prison Officers. The relevant constructs are, on the whole, unfavourable ones. On the second component this element has a low loading. The composite diagram illustrates that the element Mates (a part of a cluster with Prison Officers, Guilty Feelings and My Offence) is marked/

marked by more unfavourable evaluations on the first component than the Self. The Self is evaluated comparatively better, on the whole, than Mates, but much worse on the second component. The Self is seen as more Feminine, Negative, Mild, Slow, Weak and Worthless.

On the fourth component, Mates has a moderate loading and the relevant constructs to this element are Passive, Simple and Mild. The Self (along with Family) on this component, has a higher loading. Mates are seen by the delinquent to be not very dissimilar from Self. They see themselves as more Passive, Simple and Mild, compared to the members of their peer group.

On the sixth component, comprising of constructs which also have higher loadings on other components, this element has the highest negative loading. Moreover, the element Self is clearly differentiated from the element Mates. The relevant constructs (Passive, Smooth, Changeable) having dubious loadings, do not present a clear and meaningful picture. However, the Grid of Differential Changes shows that large changes have taken place towards constructs like Ugly, Worthless, Cruel, Awful, Weak, Rough and Passive. It seems, on the whole, Mates (the peer group) are less admired than before, yet they are rated as more Rough, Rugged than before.

X (5) (xvi) Other People

Only a small change appears to have occurred in the rating of this element, although this element has a moderate loading on nearly all the factor components. On the second factor component, this element is up-rated and denoted by constructs like Worthless, Weak and Soft, indicating a change towards a lower functional importance. However, it is also considered as Active, Complex and Intense (Fig. 10.16). The Grid of Differential Changes (Table 10.3) shows that this element has changed into a slightly more favourable direction on some constructs (e.g. Beautiful) and on others, less favourably/

favourably (e.g. Hard, Negative and Changeable). It seems that Other People may be considered Likable, but are also considered Unpredictable and functionally useless.

X (5) (xvii) Work

This element appears to have changed least of all. It features prominently only on the fifth factor component, marked by the construct Calm (Fig. 10.25). It may be that, in this context, the group considered Work as nothing other than being dull. This finding is surprising, especially when Borstal Training lays so much emphasis on acquiring work skills and habits, yet it seems to have affected the element related to Work, very little.

X (5) (xviii) Life Outside

On the whole, this is a slightly down-rated element and features high on the third factor component marked by constructs like Unchangeable and Simple. The shift seems to have occurred towards constructs like Nice, Intense, Active and Calm. However, Life Outside is also considered somewhat Worthless but Nice and Excitable (Fig. 10.20) i.e. functionally useless and dull.

X (6) SUMMARY OF RESULTS

The data were analysed by the Repertory Grid method. The analyses were carried out by INGRID 72 (consensus) computer programme, devised by P. Slater. The 'consensus' variation of the programme which treats the Differential Changes in the test-retest results of the whole group as 'The Grid'. All further analyses are carried out on this Grid of Differential Changes. There were 109 subjects in this group, who rated 20 elements on 20 constructs before they commenced Borstal training and just before their discharge from the Borstal.

The results are summarised in terms of:

(i) Principal Components and their central constructs

Analysis/

Analysis.

- (ii) Relationships between elements and constructs and the significance of differential changes observed in each element.

X (6) (i) Principal Component Analysis (Table 10.1)

The Principal Component Analysis produced 19 components.

However, only the first 6 components were considered for all further analyses. These components altogether accounted for nearly 80% of the total variance. The first component accounts for a significantly large amount of variance (28.35%). According to the measure of consistency of the differential change (by means of GRANNY, another programme which generates the significance limits of differential change for a grid of given elements and constructs in terms of mean variance expected on the first component) the mean expected variance of a 20 x 20 grid is 17.40% with an upper limit of 22.34%.

The following is a brief account of the first 6 Principal Components, in terms of their central dichotomous constructs, as used in relation to some of the elements.

(a) Evaluative Component

Personal evaluation and judgments are characterised by constructs like Good-Bad. Elements like Love, Excitement, Mother, Father, Ideal Self and Discipline described as Good, while Aggression, My Offence, the Police and Guilty Feelings are judged as Bad.

(b) Functional Component

This component is marked by a group of constructs relating to the functional importance and efficacy of the elements. A representational construct is Useful-Worthless. Discipline, Borstal Training and the Police are judged as Useful, while Self and My Offence are considered Worthless.

(c)/

(c) Stability Component

Constructs with high loadings on this component relate to predictability and comprehension factors e.g. Changeable-Unchangeable, Complex-Simple. Elements like Father, Family, Aggression and Mother are judged as Changeable and Complex, while Borstal Training, Life Outside and Guilty Feelings are Unchangeable and Simple.

(d) Emotional Vitality Component

Elements are judged by their emotional vigour and intensity denoted by constructs like Active-Passive. Aggression and Excitement are seen as Active, while Self and Family feature as Passive.

(e) Empathic-Understanding Component

Empathic closeness and emotional sensitivity and receptiveness are marked by the constructs Excitable-Calm. Mother and Aggression are seen as high on this component (Excitable) and Prison Officers and Other People are seen as low (Calm).

(f) Assertiveness Component

The constructs relating to this component also have high loadings on other components. The precise significance of this component is not clear. Constructs like Active-Passive, Smooth-Rough, Unchangeable-Changeable and Masculine-Feminine seem to point to the role and status aspect of the elements. Police, Sex, Self are seen to be Active, Smooth, Unchangeable and Masculine (more assertive and resistant to change) while Mates and Other People are on the other end, and seen as less assertive.

X (6) (ii) Differential Changes in Elements Ratings (Table 10.3, Fig. 10.1 and 10.2).

1. SELF/

(a) Self

The group, on the whole, shows a much poorer view of the Self after Borstal training. This change is very marked on the second component. Functionally, the delinquents now see themselves as weak and vulnerable, totally ineffectual and lacking in emotional vitality.

(b) Ideal Self

This element has changed in a favourable direction. The delinquents would like to be more stable and have a more empathic relationship with their families.

(c) Father

Father receives a more favourable evaluation now. He is considered functionally important, though he remains an enigmatic character. He is seen as unstable, complex and inconsistent. The delinquents find it difficult to comprehend the role of their fathers.

(d) Mother

Mother is a highly valued person and her emotional importance has increased. The delinquents feel that they have a mentally empathic relationship with their mothers. However, functionally, mother is less important than the father.

(e) Family

Family is now seen as more like Father, in that it is unstable. Its lack of emotional vitality and ineffectualness is mirrored in the Self. Yet, its value and importance is acknowledged.

(f) Discipline

Discipline is among the most important and functionally regarded as the most useful of all elements. It now receives a/

a more favourable rating and its usefulness is now acknowledged.

(g) Police

The Police, though now rated unfavourably on evaluative component, functionally is now considered quite important and useful. The role of the Police is now seen as both authoritative and threatening.

(h) Law

The Law is seen as unable to provide consistency in life for it is unpredictable. This element does not show a large change.

(i) Prison Officers

Prison Officers are rated more unfavourably on the evaluative component. Their role is seen as unimportant. They are not only seen as inconsistent, but totally lacking in emotional sensitivity and understanding.

(j) Aggression

Aggression is now regarded as the most important element. It is highly favourably rated on the evaluation component and it is now almost feared. Aggression is seen as dynamic, vigorous and a very potent emotional force. This intense emotion is clearly felt, but it is not understood, for its arousal leads to loss of control which results in unpredictable and unstable behaviour. Aggression in terms of emotional vitality is seen as very similar to Excitement, but the crucial difference is that the former is totally unacceptable, whereas the latter is favoured.

(k) Love

In terms of personal evaluation, Love is seen as quite the opposite of Aggression. Love is more closely associated with Mother/

Mother, Father and Excitement.

(l) Excitement

This is a highly favoured element. Excitement is seen as a strong desire and a need which is continually frustrated. In its intensity and vigour, Excitement is seen as similar to Aggression, but it is not feared, for it is not destructive. Excitement remains close to Mother on most components.

(m) Guilty Feelings

Guilty Feelings have now changed to an unfavourable direction on the evaluative component. Such feelings are, however, strongly felt and understood. Their effect is now seen to be more depressive.

(n) Sex

Sex has received a slightly more favourable evaluation, and its functional importance is not all that marked. It is now seen more as a means of self assertion than part of the general emotional system.

(o) My Offence

It is now a more deeply disliked element. This element is closely associated with Guilty Feelings and the Self. Offence is now seen as not only bad, but also functionally futile. The delinquents are more remorseful about their past delinquent behaviour.

(p) Borstal Training

The delinquents deeply resent Borstal Training. However, it is now considered very useful in that it has provided some stability and consistency in their environment. This element is seen as similar to Discipline in its usefulness.

(q) My Mates

T he/

The peer group is now less favourably evaluated. There is an attempt made by the delinquent to maintain a certain distance between the Self and My Mates, throughout. Their peer group and Prison Officers are now seen in the same light, for they together provide social reality. Self is also seen as possibly more assertive than the peer group. There is a lack of empathic understanding between the Self and the peer group.

(r) Other People

Other People are now seen as functionally useless, yet they may exert emotionally arousing influences on the delinquents. Other people are seen as dubious and unpredictable

(s) Work

Work appears to be the least important of all elements. It seems to have changed very little.

(t) Life Outside

Life Outside is now preferred to life inside the Borstal. However, it is considered to be worthless, for it seems to be pointless.

CHAPTER XI

DIFFERENTIAL CHANGES

OBSERVED IN SUB-GROUPS

RESULTS (C)

In the previous section Grid analysis was carried out on the whole sample of 109 subjects, and the differential changes in the rating of elements was observed and interpreted.

In this section the sample is divided into twelve sub-groups (See Chapter V) and the differential changes are analysed in the same manner on each of the twelve groups separately. The sub-groups of the sample are divided into four offence groups: Larceny, Drugs, Aggression and Sex, and each of the offence groups is further subdivided into three groups, according to the level of intelligence; "Average", "Above Average", "Below Average". The results for the first three components and the composite diagram containing the first two are presented. The changes observed are interpreted for each of the twelve sub-groups separately, and the implications of the changes are discussed. All changes referred to are significant (See Chapter X p.230) as determined by the large proportion of variance accounted for by the first factor component.

In this analysis of the sub-group data, only the first two components were taken into account and presented in composite diagrams for each sub-group. For practical purposes the data relating to the two principal components were considered sufficient to illustrate the technique and highlight the salient findings. However, further details are included in Appendix (D) . For each of the twelve sub-groups, tables are set out to give (a) overall changes in Elements and proportion of variance accounted for the first three components (b) factor loadings for Elements and Constructs and (c) figures representing Elements' dispersion on each of the three components.

XI (1) (i) LARCENY - "Above Average" Fig. 11.1

The amount of differential change in the ratings of this group has been very large. Elements that have changed in a favourable direction are PRISON OFFICERS, AGGRESSION, MY MATES and EXCITEMENT. DISCIPLINE, LAW, MY OFFENCE, BORSTAL TRAINING and OTHER PEOPLE show a change in a more unfavourable direction. SELF and IDEAL SELF show a change in both directions on different constructs.

On the first factor component the most important elements are MY OFFENCE and IDEAL SELF. The former is now judged poorly on this evaluative component, whereas the IDEAL SELF is now rated very highly. This group appears to dislike authority and external control (LAW, POLICE and BORSTAL TRAINING).

On the second factor component SELF comes to be judged poorly.

On the third factor component PRISON OFFICERS are admired for their potency (Masculine and Intense).

This group comes to consider AGGRESSION as a potent force, and it is seen to be contained in the admired adult male social role. AGGRESSION is not judged necessarily as destructive for it is seen as a means of asserting authority and is a source of excitement. They no longer see their delinquent behaviour as a satisfactory route for excitement. They have a likeable and gentle view of their IDEAL SELF. They also rate LOVE highly. They seem to have a considerable capacity for concern about their delinquent behaviour.

XI (1) (ii) LARCENY - "Average". Fig. 11.2

The elements showing large changes in an unfavourable direction are SELF, IDEAL SELF, POLICE, PRISON OFFICERS, GUILTY FEELINGS and MY MATES. The elements showing change in a more favourable direction are FAMILY, DISCIPLINE, LOVE EXCITEMENT, SEX, MY OFFENCE and OTHER PEOPLE.

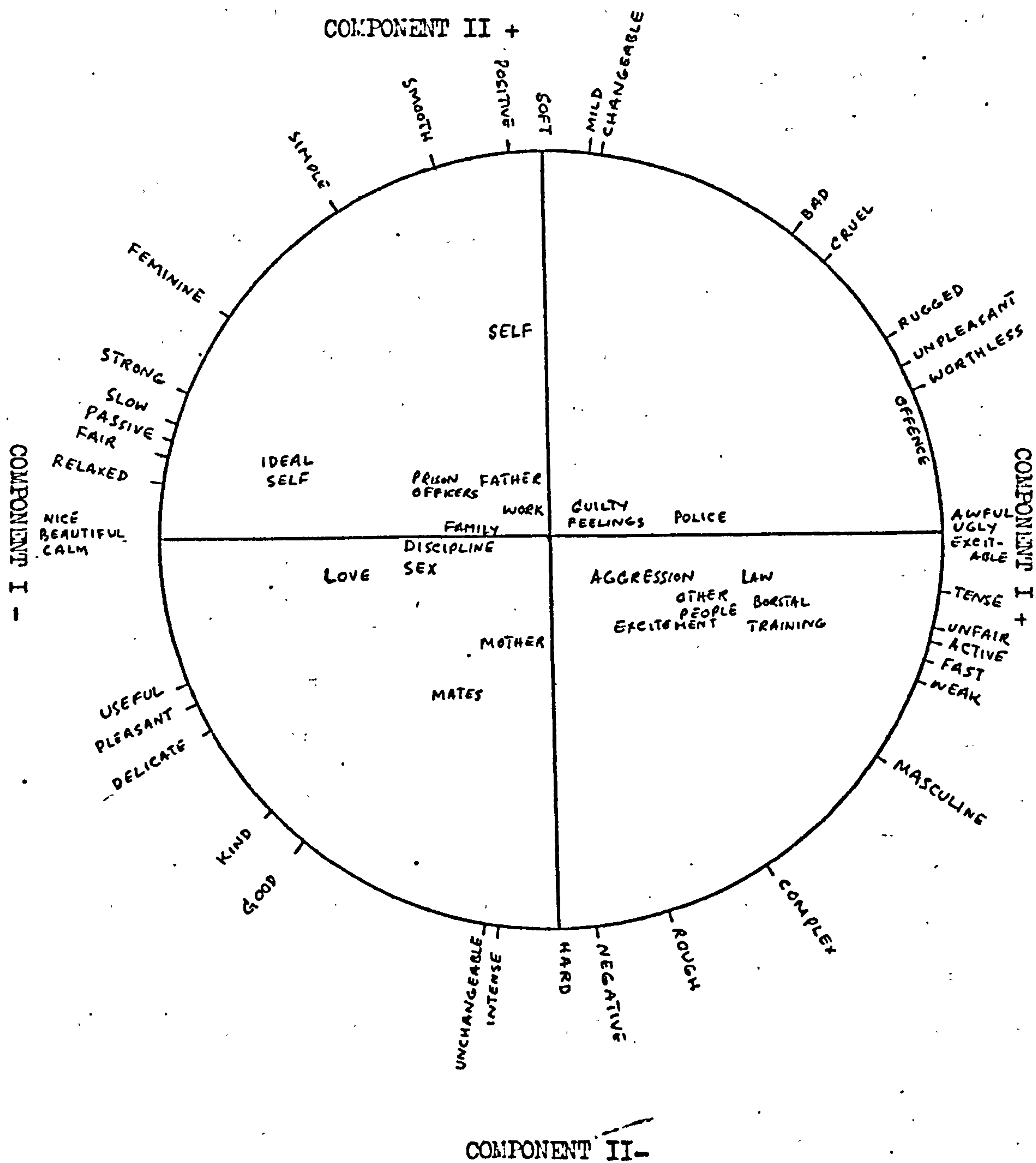
On the first factor component, LOVE, LIFE OUTSIDE, DISCIPLINE, IDEAL/

FIG: 11.1

COMPOSITE DIAGRAMSUB-GROUP: LARCENY

RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS

Above Average

ON
COMPONENTS I AND II

IDEAL SELF, EXCITEMENT, SEX and MY OFFENCE are all rated very favourably (Good, Useful, Pleasant, Kind, Nice, Fair, Active and Fast). GUILTY FEELINGS, PRISON OFFICERS, OTHER PEOPLE, MY MATES and LAW are rated unfavourably (Bad, Worthless, Unpleasant, Cruel, Awful, Unfair, Passive and Slow).

On the second factor component, EXCITEMENT, FAMILY, OTHER PEOPLE, SEX are rated as desirable (Beautiful, Hard, Masculine and Tense). LIFE OUTSIDE and SELF are seen as disvalued (Ugly, Soft, Feminine and Relaxed).

On the third component, OTHER PEOPLE are disliked (Negative and Simple). GUILTY FEELINGS and MOTHER and FATHER are liked.

This group is resentful of the authority system, which they see as unjust, though they do not disvalue DISCIPLINE.

They seem to have no stable relationship with their peers and they are most concerned about their good feelings. LOVE and EXCITEMENT are dominant motivating forces, and they do not regard their delinquent behaviour as all bad. Their delinquent behaviour is a part of a generalised excitement seeking behaviour which is closely associated with LIFE OUTSIDE and the IDEAL SELF. This disvalues conscious expression of guilt, which for them is painful and incompatible with their belief in the justification of their own acts.

When WORK is seen as associated with FAMILY and BORSTAL TRAINING it is disliked and resented. It is accepted in a context of the peer group and excitement. They do not value a structured social environment.

XI(†) (iii) LARCENY - "Below Average" Fig. 11.3

The elements that have moved in an unfavourable direction are FAMILY, PRISON OFFICERS, AGGRESSION, SEX and MY OFFENCE. The elements that have changed in a more favourable direction are IDEAL SELF, LOVE and LIFE OUTSIDE. The elements that have changed inconsistently are FATHER/

FIG: 11.2

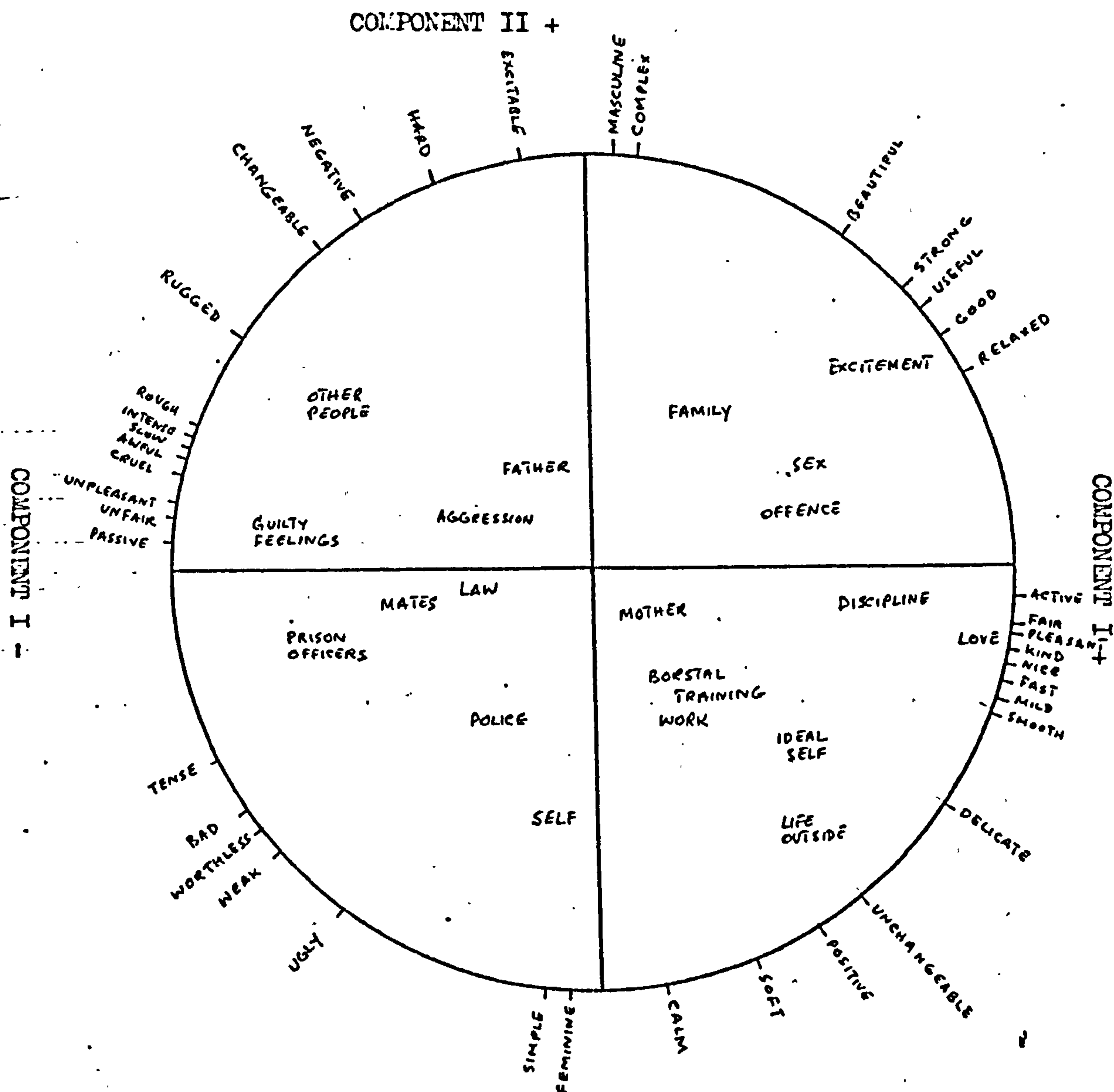
COMPOSITE DIAGRAMSUB-GROUP: LARCENY

RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS

Average

ON
COMPONENTS I AND II

COMPONENT II +



COMPONENT II-

FIG: 11.3

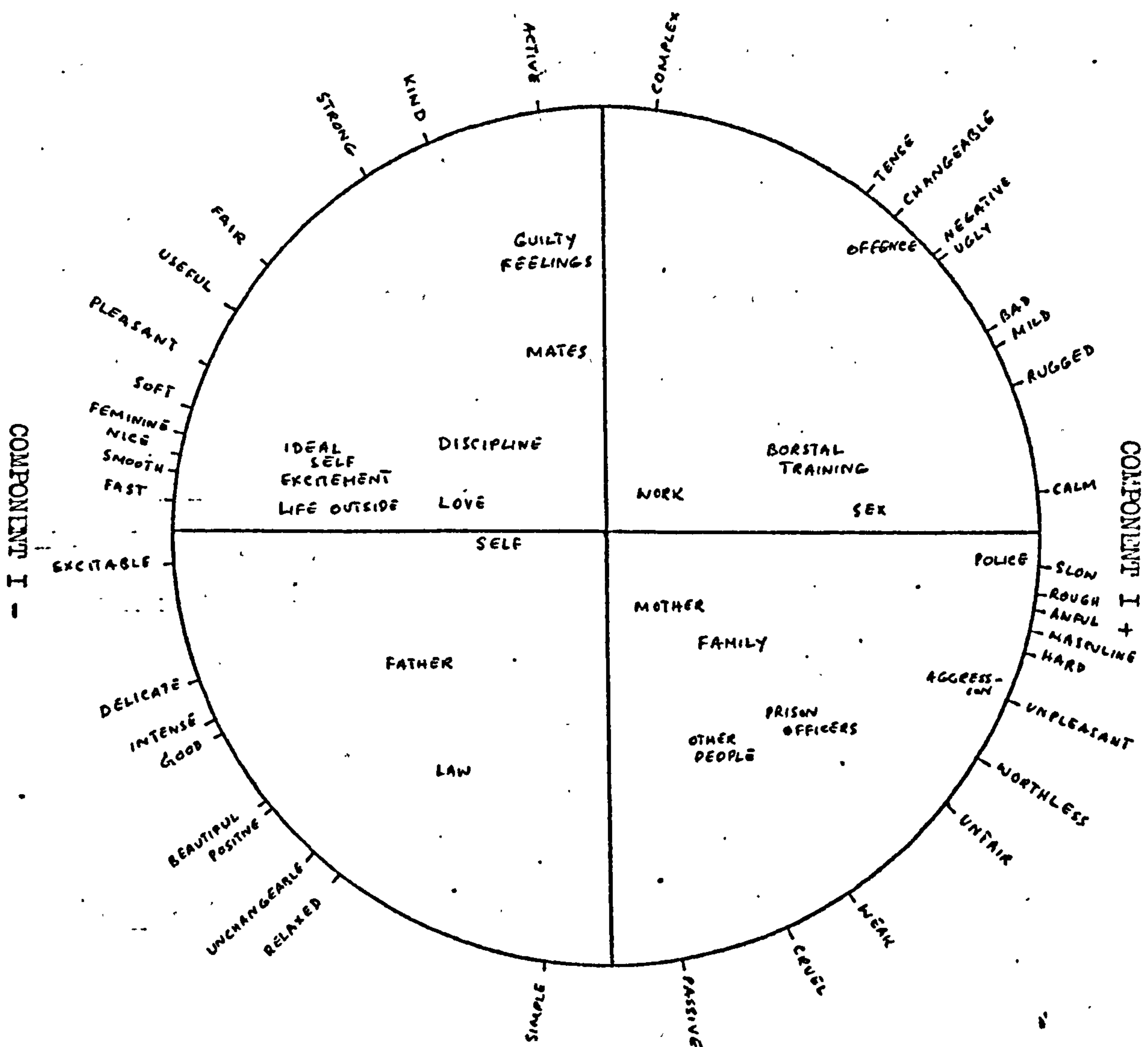
COMPOSITE DIAGRAMSUB-GROUP: LARCENY

Below Average

RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS

ON
COMPONENTS I AND II

COMPONENT II +



COMPONENT II -

FATHER, DISCIPLINE, POLICE and EXCITEMENT. SELF, MOTHER, LAW, GUILTY FEELINGS, BORSTAL TRAINING, OTHER PEOPLE and WORK remain more or less unchanged. On the first factor component, AGGRESSION and POLICE are seen as Bad, Ugly, Worthless, Unpleasant, Awful and Unfair. EXCITEMENT, IDEAL SELF and LIFE OUTSIDE are seen as Good, Beautiful, Useful, Pleasant, Nice and Fair.

On the second factor component, MY OFFENCE and GUILTY FEELINGS are seen as Weak. LAW, MY MATES and FATHER are seen as Strong.

On the third factor component, DISCIPLINE, LOVE and PRISON OFFICERS are rated as Unchangeable and Positive and WORK is seen as Changeable and Negative.

This group disvalues aggression. It is perceived as a potent but unjust force. They seem to prefer a safe, structured environment in which they can express their feelings and seek stimulation, both within and without the Borstal environment. They respect authority if it is not aggressively offered. They appear to have a good self concept which conflicts with their actual position in the work world (Changeable and Negative). They seem to have a fairly good view of parents. OTHER PEOPLE and FAMILY, who have provided the social experience are seen as unpredictable, leading to feelings of insecurity.

XI (2) (i) DRUG - "Above Average" Fig. 11.4

In this sub-group the elements showing change in an unfavourable direction are SELF, FAMILY, POLICE, LAW, AGGRESSION and MY OFFENCE. FATHER, MOTHER, DISCIPLINE, LOVE, BORSTAL TRAINING, MATES, WORK and LIFE OUTSIDE show a shift towards a more favourable direction. IDEAL SELF and SEX show change in different directions on different scales. PRISON OFFICERS, EXCITEMENT, GUILTY FEELINGS and OTHER PEOPLE show little change. On the first factor component SEX is rated as the most likeable and desirable element, followed by FATHER, MATES, LOVE and LIFE OUTSIDE.

On/

FIG: 11.4

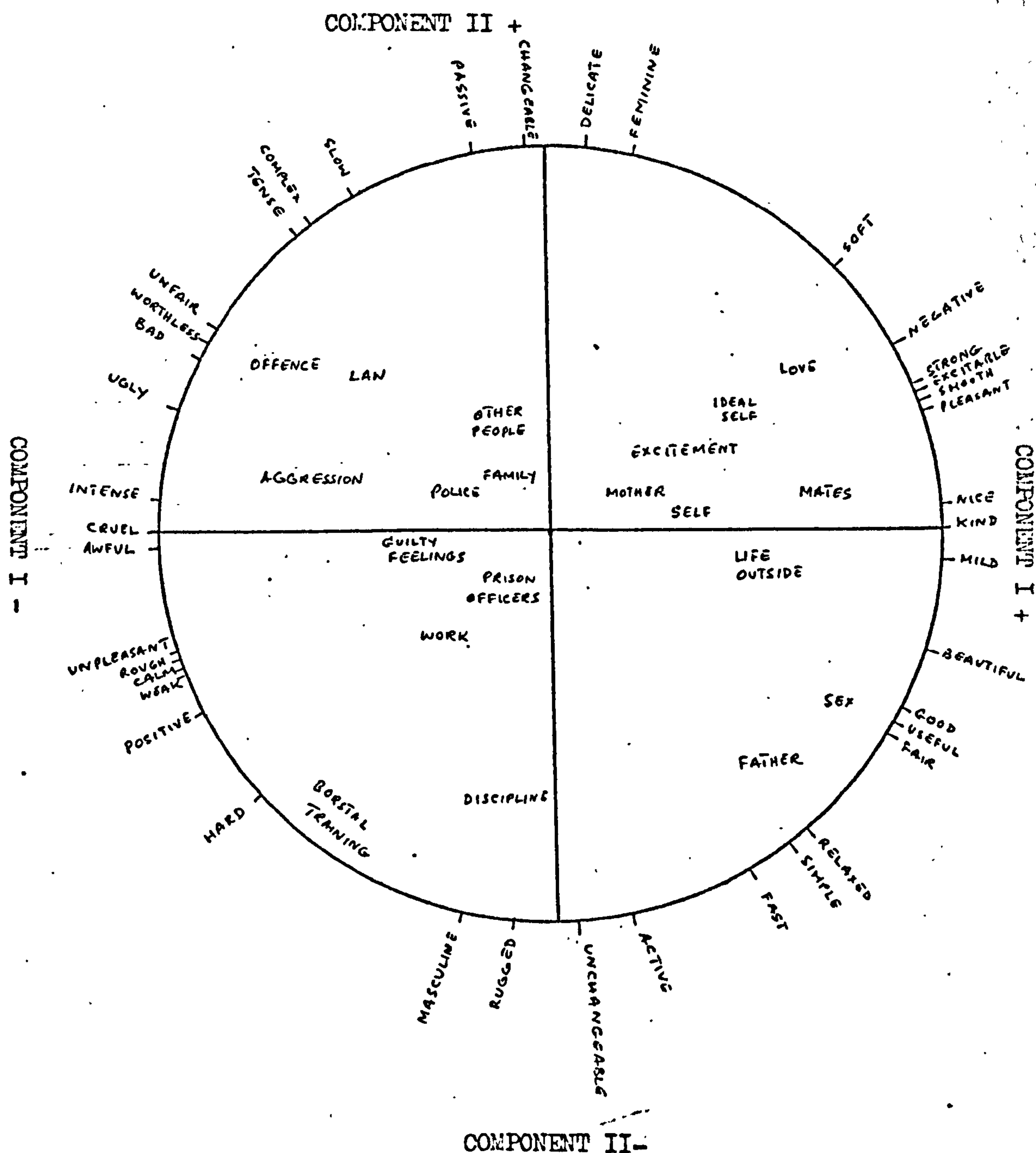
COMPOSITE DIAGRAMSUB-GROUP: DRUG

RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS

Above Average

ON
COMPONENTS I AND II

COMPONENT II +



On the third factor component, DISCIPLINE, LOVE and LIFE OUTSIDE move towards being somewhat anxiety provoking and seem little understood. SEX seems to provoke no anxiety for this group and seems easily comprehensible. The distance between SEX and LOVE reflects the split between the physical activity of the one and emotional and social dimensions of the other. There appears to be a consequent alternation between their social anxieties and their personal confidence in situations where the social ties are bounded by their own wishes. Both SELF and IDEAL SELF are rated as more likeable.

FATHER becomes liked and it is expected that he will be able to provide discipline and structure, which he is seen as having failed to do. If a structure is provided, the world becomes predictable and understood. If a structure is not provided the social role becomes confused, emotional needs become incomprehensible and physical relationships are preferred because they are easier to understand. Their excitement seeking behaviour becomes encapsulated in drugs taking. For the "above average" drug taking delinquents, the reality of the social world, as they defined it, is not changed. They provide their own social reality which becomes a drug sub-culture.

IX (2) (ii) DRUG - "Average" Fig. 11.5

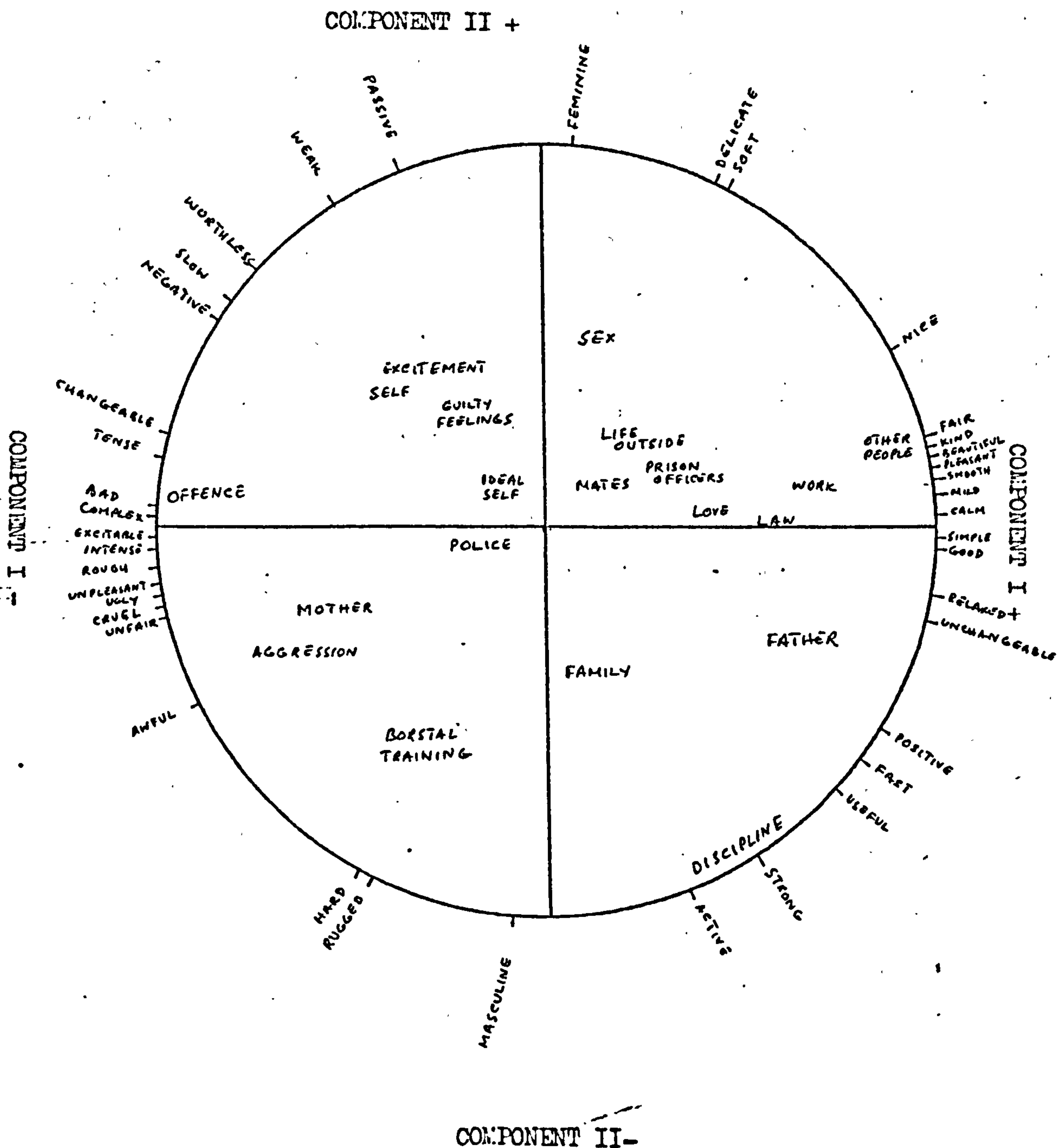
For this group, the elements which show a shift in an unfavourable direction are SELF, PRISON OFFICERS, GUILTY FEELINGS and MY OFFENCE. In contrast, FATHER, FAMILY, DISCIPLINE, LOVE, BORSTAL TRAINING and OTHER PEOPLE show a move in a favourable direction.

The changes in elements MOTHER, LAW, AGGRESSION and EXCITEMENT are complex and ambiguous. Very little change is observed in IDEAL SELF, POLICE, SEX, MATES, WORK and LIFE OUTSIDE. On the first factor component, DISCIPLINE, OTHER PEOPLE, LAW and FATHER are valued highly, while MY OFFENCE, AGGRESSION, MOTHER and EXCITEMENT are valued lowly and seen as undesirable.

FIG: 11.5

COMPOSITE DIAGRAMSUB-GROUP: DRUG
Average

RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS

ON
COMPONENTS I AND II

On the second factor component, DISCIPLINE, BORSTAL TRAINING, AGGRESSION and MOTHER become more Dominant and Masculine, while SEX and EXCITEMENT become Weak, Passive and Ineffectual.

On the third factor component, SELF becomes Bad, Weak and Simple and SEX and LIFE OUTSIDE become Good, Strong and Complex.

This group has a poor SELF and IDEAL SELF concept. They resent authority, though discipline and structure are highly desired,, respected and important to them.

MOTHER, who is rated very negatively, is yet seen as providing the authority in the family rather than FATHER. She is seen as the stronger of the two. FATHER is rated very positively, but is not seen as providing authority of strength. Thus, not only are parental roles reversed, but also the model for the social role learning they provide is confused. This can be seen clearly from the position of SELF and IDEAL SELF being judged negatively (e.g. Bad, Ugly, Worthless, Cruel, etc.) and as vulnerable (e.g. Weak, Soft, Delicate, Feminine, Passive).

This sub-group comes to feel badly about their delinquent behaviour and show a capacity for concern as indicated by the proximity of GUILT FEELINGS and SELF. Drug taking can be seen as a source of excitement, though it is considered as bad.

IX (2) (iii) DRUG - "Below Average" Fig. 11.6

The elements that show a shift in an infavourable direction are SELF, IDEAL SELF, FATHER, FAMILY, AGGRESSION and MY OFFENCE. DISCIPLINE, LAW, LOVE, WORK, LIFE OUTSIDE have moved in a more favourable direction. MOTHER, SEX, BORSTAL TRAINING, MATES and OTHER PEOPLE change in different directions on different constructs. The elements which seem to have changed very little are POLICE, PRISON OFFICERS, EXCITEMENT and GUILTY FEELINGS.

On/

FIG: 11.6

COMPOSITE DIAGRAM

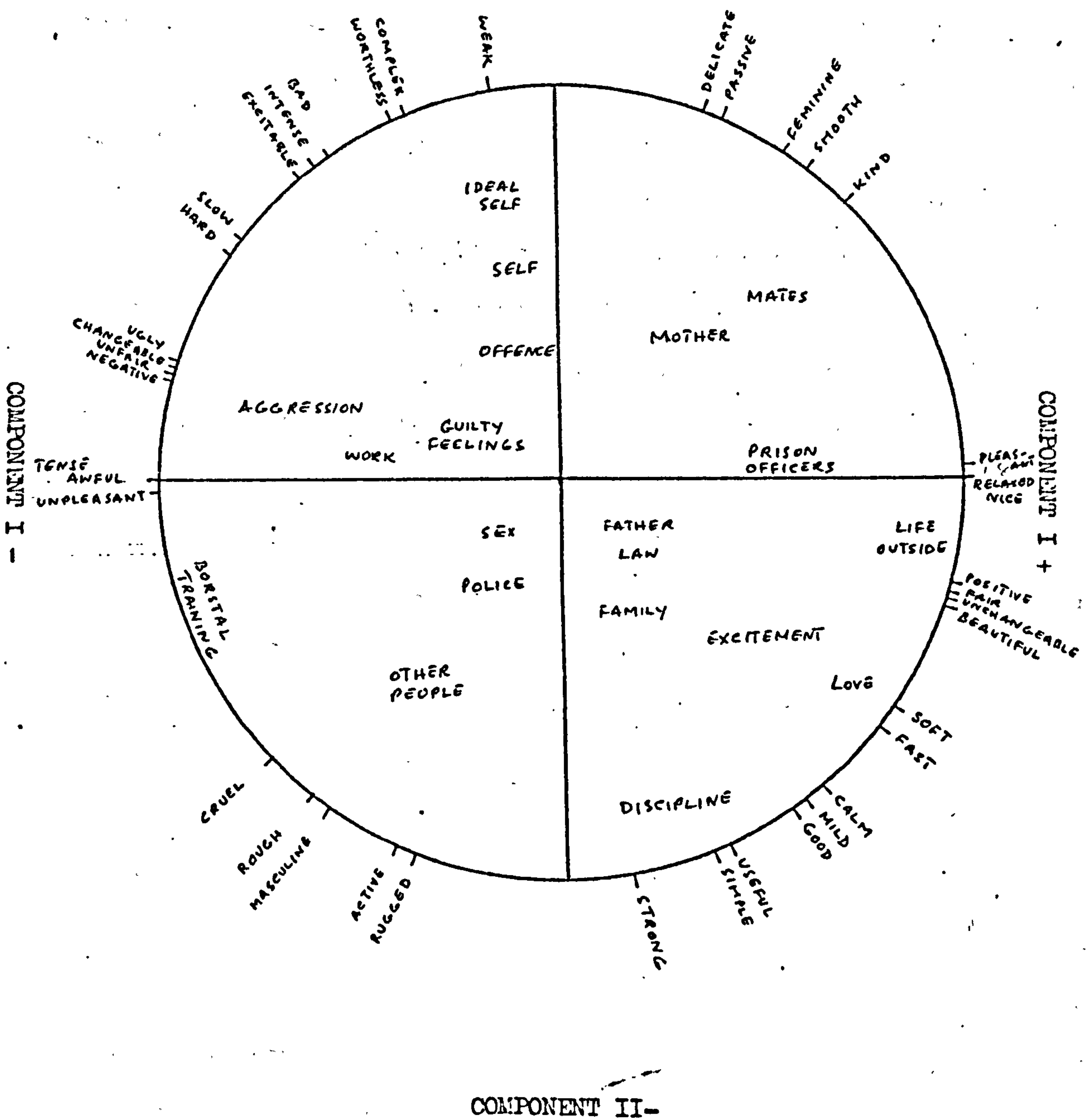
SUB-GROUP: DRUG

Below Average

RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS

ON
COMPONENTS I AND II

COMPONENT II +



On the first factor component, BORSTAL TRAINING, AGGRESSION, OTHER PEOPLE and WORK tend to be disliked and resented. LIFE OUTSIDE, LOVE and PRISON OFFICERS are at the favourable pole of the first factor component.

On the second factor component, SELF and IDEAL SELF are judged as ineffectual. DISCIPLINE, on the other hand, is judged as a desirable and potent force. OTHER PEOPLE are defined somewhat unfavourably, though they are seen as more potent than SELF.

On the third factor component, MATES and LIFE OUTSIDE are considered to have masculine characteristics, whereas FAMILY, SEX and IDEAL SELF are seen as feminine and passive. On the whole, this group appears highly subjective in evaluation of all the three factor components.

Though they resent being punished, as shown by a negative evaluation of BORSTAL TRAINING, changes in their responses show regression and passivity in their seeking for a loving and authoritative figure. SELF and IDEAL SELF are seen as Bad, Weak, Soft, Delicate, Smooth and Complex, and their low self esteem is linked with strong feelings of inadequacy.

PRISON OFFICERS are seen as benevolent figures, rated closely to LOVE and LIFE OUTSIDE. DISCIPLINE, OTHER PEOPLE and POLICE are seen as Good and Strong. Authority, if close to them, is admired and respected. FATHER, for this group, appears to have failed to fulfill this authoritative role, although they feel closer to him than they do to MOTHER. MOTHER is defined as Passive and Bad and Worthless, very close to their evaluation of SELF and IDEAL SELF. For them, the manly dimension which would have defined their social role is DISCIPLINE, OTHER PEOPLE and LIFE OUTSIDE, to which they seem to have no access. Drug taking may well have been a means of regressing into a passive dependent position, which appears to be no longer of interest to them.

XI (3) (1) AGGRESSIVE - "Above Average" Fig. 11.7

The elements showing change in an unfavourable direction are SELF, POLICE, LAW and MATES. Elements showing change in a favourable direction are DISCIPLINE, PRISON OFFICERS, EXCITEMENT, MY OFFENCE, OTHER PEOPLE and WORK. No large changes are shown in the ratings of IDEAL SELF, FATHER, LOVE, GUILTY FEELINGS, SEX, BORSTAL TRAINING and LIFE OUTSIDE. The elements FAMILY and AGGRESSION shift in a different direction on different constructs. On the first factor component, EXCITEMENT stands out as the most highly favoured element, closely followed by OTHER PEOPLE, LOVE and MOTHER. SELF, MATES and POLICE show a move in a highly unfavourable direction, which seems to indicate an active rejection of the SELF, and peer group and a punitive authority.

On the second factor component, FAMILY is defined as ineffectual, not providing sufficient control or a definite structure. It is rated as Soft, Mild, Relaxed and Passive. AGGRESSION, OTHER PEOPLE and MY OFFENCE on the other hand are now defined as a more potent source of stimulation. They are rated as Hard, Excitable, Tense, Complex and Active.

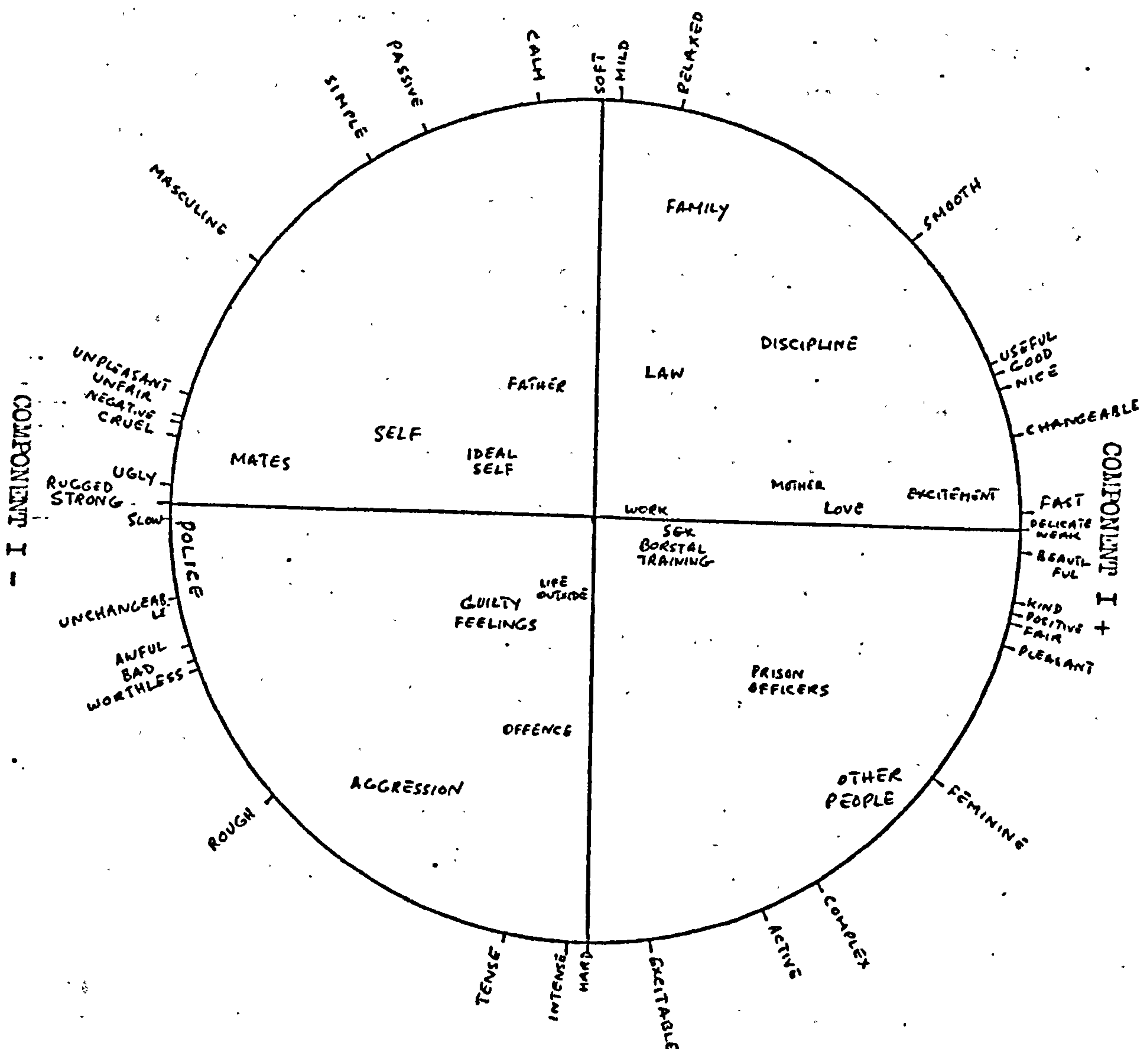
The third factor component, shows that AGGRESSION becomes respected as it provides a consistent and predictable source of excitement and possibly masculine assertiveness. Guilt and a concern for punishment would seem to be considered signs of personal weakness. It would appear that AGGRESSION for this group is seen as a source of strength, and an important means for coping with social reality. Though it may be 'bad' to be aggressive, yet this strong and powerful emotion provides a consistent motivational drive.

MOTHER is seen by this group as stronger and more dominant than FATHER. A large distance in the position of MOTHER and FATHER on the first factor component leading to opposing positions. MOTHER is /

FIG: 11.7

COMPOSITE DIAGRAMSUB-GROUP: AGGRESSIVE
Above AverageRELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS
ON
COMPONENTS I AND II

COMPONENT II +



COMPONENT II -

is defined as very likeable and acceptable (eg. Good, Beautiful, Useful, Kind, Pleasant, Fair). On the third factor component she is seen as dominant within a favourable context (eg. Strong, Fast and Unchangeable). In contrast FATHER, for this group is defined as having little personal value. On the first factor component FATHER is placed in a position which implies personal rejection of him. On the second factor component he is defined as ineffectual as a disciplinary authority. On the third factor component he is placed closely to outside sources of authority (eg. LAW, POLICE, BORSTAL TRAINING) and again rated as unreliable and inconsistent, (eg. Weak, Slow, and Changeable). It is clear that for this group MOTHER is more liked than FATHER and she is seen as the more dominant and stronger figure. The rejection of the weak FATHER and the inadequate family seems to go together with a rejection of the external controls given by society. The aggressive acts committed by the "above average" group may reflect hostile feelings deflected from their fathers. These feelings seem to be closely linked to their emerging sexuality. THE SELF becomes strongly rejected, being perceived as weak and ineffectual. As the SELF is strongly identified with the peer group, the peer group too becomes rejected. The lack of an acceptable authoritative model leaves them without clear social and sexual roles. They seem to have no clear inner structure within which to organise themselves in relation to the outside world, and a correspondingly poor idea of social role play. EXCITEMENT which they rate as the most personally desired affectual state, becomes difficult to achieve, in a socially acceptable way. It is achieved through aggressive behaviour, which they evaluate negatively, but find justifiable as a source of potency. Within their own social reality, their own physical strength is seen by them as the only reliable attribute.

XI (3) (ii) AGGRESSIVE - 'Average' Fig. 11.8

The elements showing a large change in any unfavourable direction are LAW, PRISON OFFICERS, AGGRESSION, MY OFFENCE and MY MATES. The elements showing a large change in a favourable direction are IDEAL SELF, FATHER, POLICE, EXCITEMENT, OTHER PEOPLE and WORK. LOVE and GUILTY FEELINGS show a shift in different directions on different constructs. No large changes are shown in the ratings of SELF, MOTHER, FAMILY, DISCIPLINE, SEX, BORSTAL TRAINING and LIFE OUTSIDE.

On the first factor component, LOVE, WORK, SEX and excitement show a change in a likeable and favoured direction. AGGRESSION, PRISON OFFICERS, GUILTY FEELINGS, MY MATES, and MY OFFENCE show a shift towards being disliked.

On the second factor component two sets of elements are clearly polarised, FATHER and POLICE are seen as manly, while LOVE is highly valued as a sensitive emotion. PRISON OFFICERS are associated with unmanly qualities.

On the third factor component SELF, MY OFFENCE and MOTHER are closely linked together and seen as Unchangeable, Soft and Mild. At the extreme opposite end, OTHER PEOPLE are seen as Changeable, Hard and Intense.

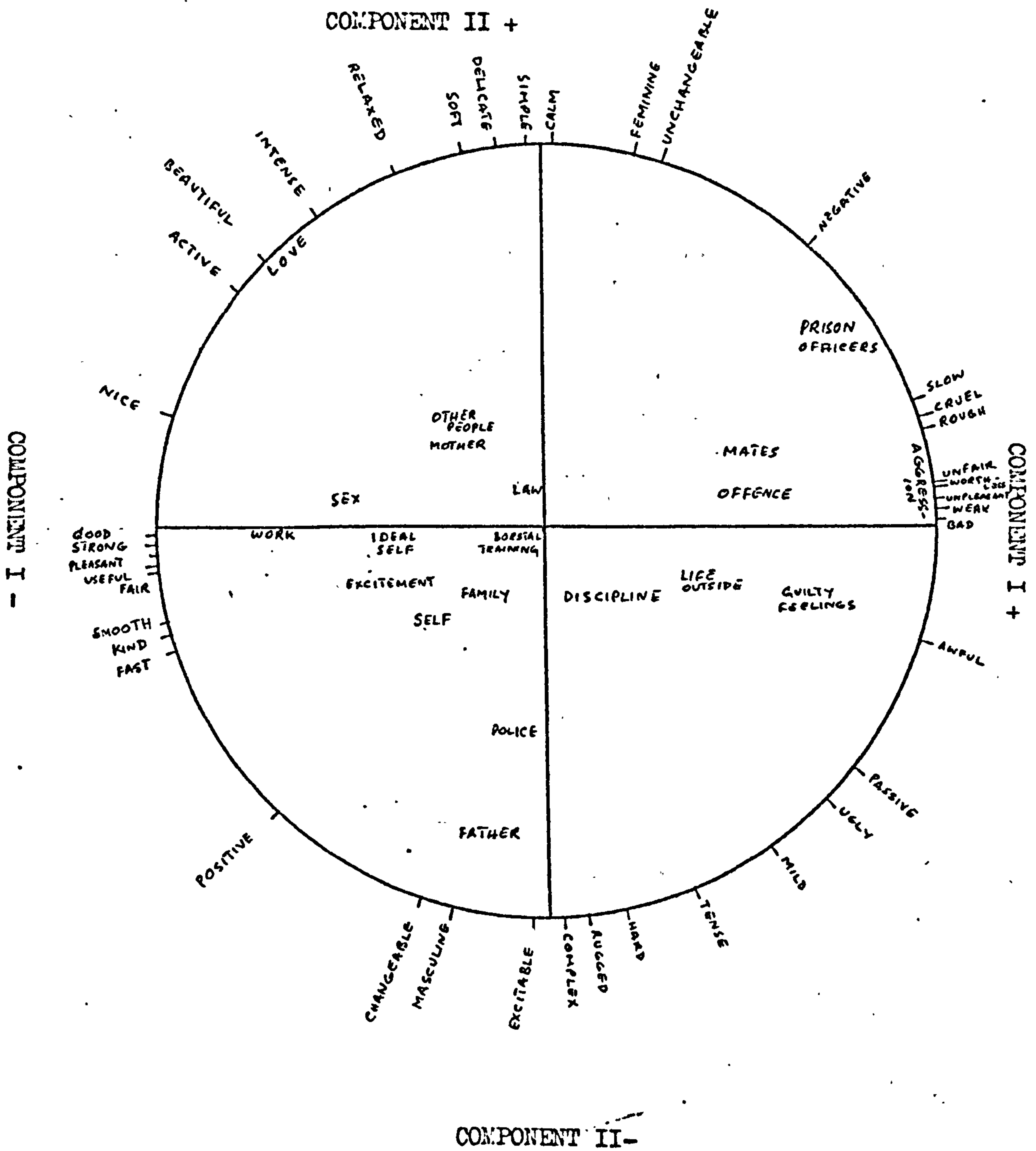
This group as a whole have come to reject the aggressive acts which brought them to Borstal Training. They tend to dissociate themselves from their delinquent behaviour. They accept both parents. FATHER as the masculine and authoritative figure, whereas MOTHER is feminine and delicate. This group is capable of concern and remorse, as shown by the position of GUILTY FEELINGS and MY OFFENCE. Their SELF concept remains good and distant from the peer group. They are favourably disposed to WORK.

This/

FIG: 11.8

COMPOSITE DIAGRAMSUB-GROUP: AGGRESSIVE
Average

RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS

ON
COMPONENTS I AND II

This group appear to accept the FATHER and authority figure as dominant and manly yet they identify themselves as unassertive, soft and mild, closer to the attributes of MOTHER. EXCITEMENT is linked to SEX, and seen as a desirable emotion. EXCITEMENT is also linked with AGGRESSION and it is seen as a means of asserting a sexual role, of which they appear to be unsure. This group seems to have particular difficulties in adjusting to the complexities of society and are having difficulties in effecting the transition from the known family structure to people in general. WORK seems to be developing as a new mode of expressing their adult sexual role.

XI (3) (iii) AGGRESSIVE - 'Below Average' Fig. 11.9

The elements DISCIPLINE, POLICE, GUILTY FEELINGS, SEX, BORSTAL TRAINING have all moved in a more favourable direction. MOTHER, FAMILY, EXCITEMENT, WORK and LIFE OUTSIDE seem to have changed in both directions on different constructs.

On the first factor component BORSTAL TRAINING is the most highly favourable element, followed by POLICE and PRISON OFFICERS. EXCITEMENT, LIFE OUTSIDE and IDEAL SELF have changed in an unfavourable direction. Elements relating to control and authority are respected.

On the second factor component MOTHER stands out. DISCIPLINE and LAW are considered as Rough, Hard, and Active and admired for their representation of authority. SELF is seen as distanced from the Peer Group. MATES are thought of as external authority symbols and are respected as such.

On the third factor component LOVE, SEX and MATES seem incomprehensible/

FIG: 11.9

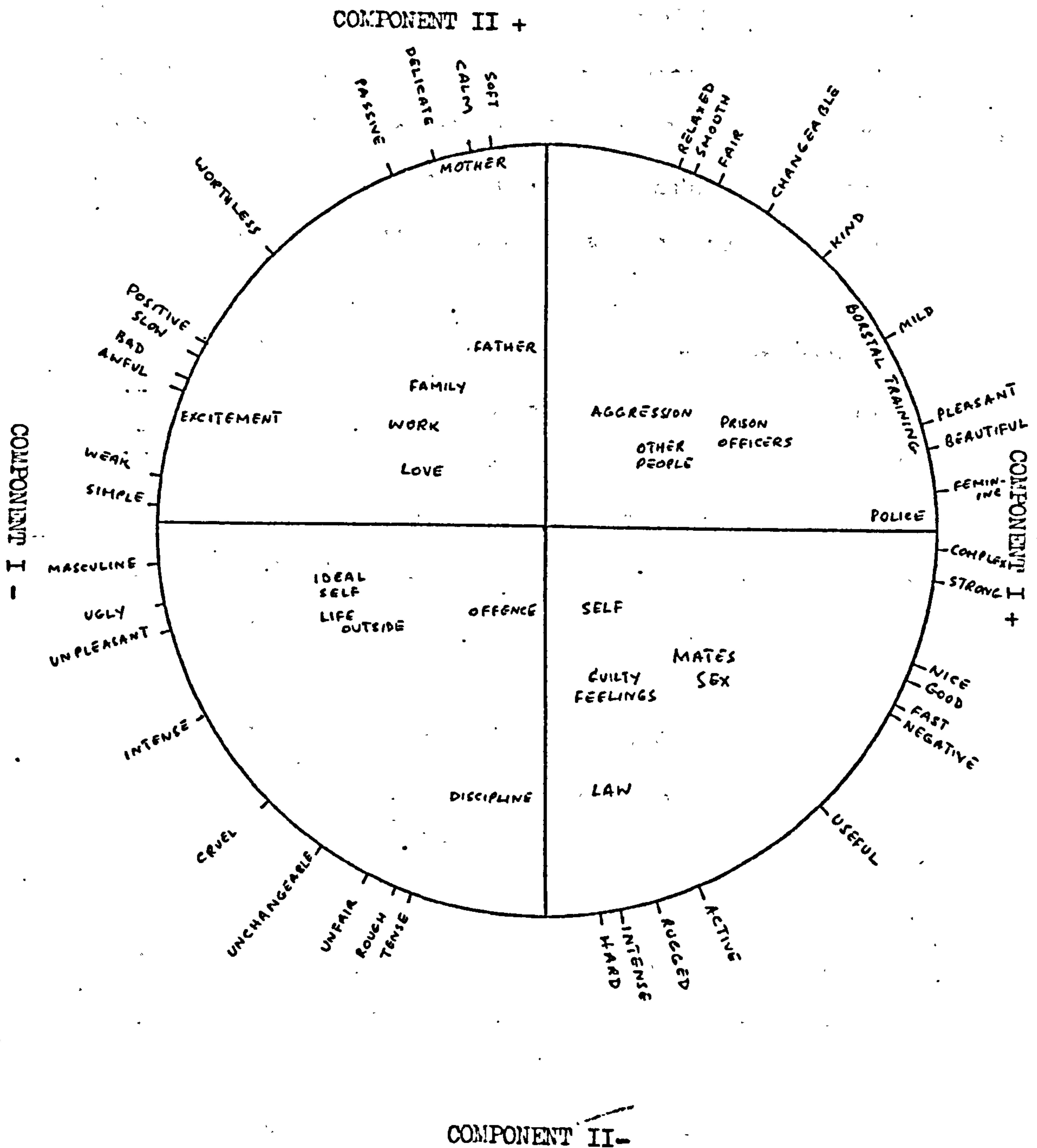
COMPOSITE DIAGRAMSUB-GROUP: AGGRESSIVE

RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS

Below Average

ON

COMPONENTS I AND II



incomprehensible, marked by constructs Unfair, Changeable, Mild, Calm and Complex. At the other end are placed GUILTY FEELINGS and SELF, marked by constructs Fair, Unchangeable, Intense, Excitable and Simple.

This group tends to rate the authority figures (POLICE, PRISON OFFICERS) and the structured environment highly favourably. In contrast, their own unstructured feelings to life as they know it and their ideas about themselves are all rated very unfavourably. This is the only constant pattern reflected in their responses. They respect authority and admire aggression which seems to be a good model for their social behaviour. They seem to have problems with their sexuality. They seem to be unable to structure their thoughts or their feelings in a way they can make sense of and find acceptable.

EXCITEMENT is linked with masculinity and unpleasantness. LOVE and SEX and the Peer Group are closely linked with each other and unstably defined as Unfair, Changeable, Mild, Calm and Complex.

The MOTHER is extremely important and is closely linked with LOVE and WORK. FATHER on the whole is a shadowy figure without any salient attributes.

XI (4) (i) SEX - 'Above Average' Fig. 11.10

The elements that have changed in the more favourable direction are the IDEAL SELF, MOTHER, POLICE, LAW, EXCITEMENT and BORSTAL TRAINING. FAMILY, DISCIPLINE, PRISON OFFICERS, GUILTY FEELINGS, OTHER PEOPLE and WORK have moved in the opposite direction. SELF, AGGRESSION and LOVE have moved in different directions on different constructs. FATHER remains more or less unchanged. On the first factor component FAMILY AGGRESSION and SELF are negatively/

FIG: 11.10

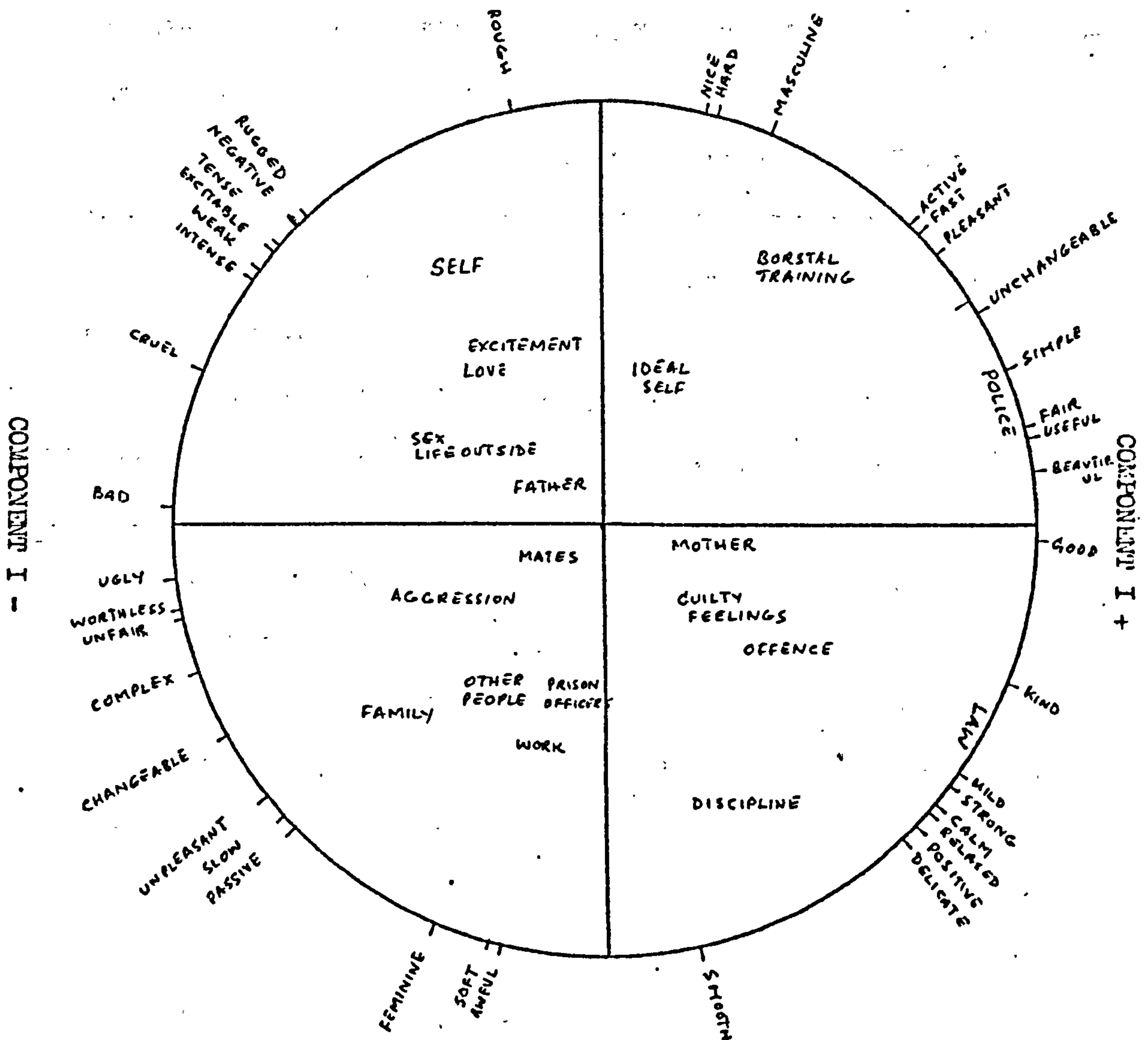
COMPOSITE DIAGRAM

SUB-GROUP: SEX

RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS
ON
COMPONENTS I AND II

Above Average

COMPONENT II +



negatively valued. POLICE and LAW are highly valued.

On the second factor component BORSTAL TRAINING is judged as Masculine, Rough, Hard and Exciteable. SELF is defined as Bad as well as Rough. LOVE is considered a desirable attribute. FAMILY and DISCIPLINE are judged as Awful, Smooth and Soft.

On the third factor component MOTHER stands out as the most important element and is seen as Complex and Changeable. DISCIPLINE, BORSTAL TRAINING, GUILTY FEELINGS are defined as Unchangeable, Delicate and Simple. This group has a low and disvalued concept of SELF and FAMILY. FATHER appears to be rated indifferently.

This group is emotionally tied up with MOTHER, who appears to be the most important person, though she is unpredictable and incomprehensible as indicated by constructs like Changeable, Rugged and Complex. Their delinquent behaviour appears to be closely linked to MOTHER. She is idealised and given dual sexual characteristics both male and female. Their social and sexual role is deflected by their relationship with this dominant MOTHER who fails to provide a structured consistent reality.

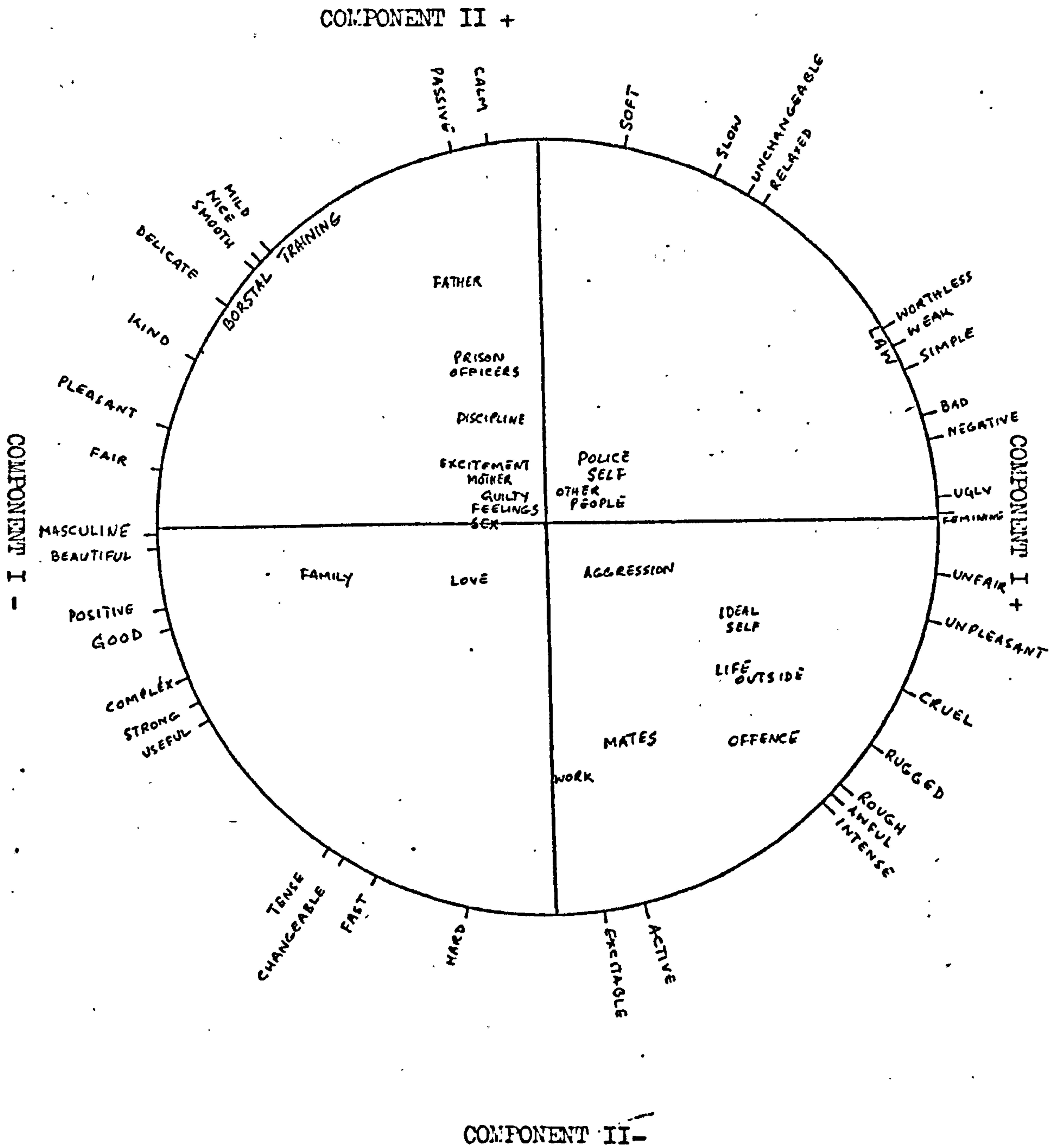
Their own emotional life and feelings about themselves are rated very negatively, and split off from their masculinity. SEX is closely linked with LOVE and EXCITEMENT and their delinquent behaviour provides a link with OTHER PEOPLE and provides a social role. They seem to be confused about their sexual identity.

XI (4) (ii) SEX - 'Average' Fig. 11.11

The elements that have shift in the unfavourable direction are FATHER, POLICE and LAW. FAMILY, BORSTAL TRAINING, WORK and LIFE OUTSIDE have changed in a more favourable direction. SELF, IDEAL/

FIG: 11.11

COMPOSITE DIAGRAM
 SUB-GROUP: SEX
 Average
 RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS
 ON
 COMPONENTS I AND II



IDEAL SELF, MY OFFENCE and MY MATES have changed in different directions on different constructs. Elements showing little change are, MOTHER, DISCIPLINE, PRISON OFFICERS, AGGRESSION, LOVE, EXCITEMENT, GUILTY FEELINGS, SEX and OTHER PEOPLE.

On the first factor component, MY OFFENCE, IDEAL SELF, LAW and LIFE OUTSIDE are on the unfavourable end of the component, which is marked by constructs like Rugged, Intense and Complex. FAMILY and BORSTAL TRAINING are valued highly and are considered Delicate Mild and Simple.

On the second factor component, FATHER is considered as Passive and ineffectual, while BORSTAL TRAINING, MY OFFENCE and MY MATES are seen as Rough, Kind, Rugged, Fast, Active and Tense.

On the third factor component SELF, with MY MATES and IDEAL SELF stand out on constructs like Bad, Worthless, Unfair, Masculine. This group appears to see their parents as having their role reversed. MOTHER is seen as Hard, Fast, Masculine and FATHER as Soft, Slow and Feminine. The group has a low image of SELF and the peer group. They value BORSTAL TRAINING for it is just, but not seen to have any relationship with their offence.

They appear to have liked the experience of Borstal Training. The LAW is closely linked with LIFE OUTSIDE, and seen as unjust. Their offence is associated with their judgment about their fathers and split off from their guilty feelings. They appear to identify with FATHER although they see MOTHER associated to identify with FATHER although they see MOTHER associated with disciplining in the outside world. They come to believe themselves and their peer group as Bad, Worthless and Mild. This group is relatively complicated, for they identify with a bad father who is seen as likeable but weak. The mother is seen as strong and dominant and provides authority. Their sex offence does not seem to play any significant/

significant part in their lives. The delinquent behaviour is seen as a means of asserting ones self and adopting a strong dominant and masculine role. LIFE OUTSIDE is now seen as a great opportunity to assert their newly learned role. FATHER is seen to be an ineffectual weakling, whereas MOTHER is relatively dominant. A pleasant and happy family life is actively sought and the nearest substitute to this is the experience in the Borstal, which appears to have given them the opportunity to play the strong dominant male role in life in general.

This group, more than any other, is looking forward to release from BORSTAL. SEX is more closely linked with emotions like EXCITEMENT and LOVE than delinquent behaviour. DISCIPLINE and LAW are considered Bad but Useful.

XI (4) (iii) SEX - 'Below Average' Fig. 11.12

The elements showing a move in an unfavourable direction are SELF, MOTHER, FAMILY, MY MATES and LIFE OUTSIDE. IDEAL SELF, POLICE, PRISON OFFICERS and EXCITEMENT show a move in a more favourable direction. LAW, MY OFFENCE, BORSTAL TRAINING and WORK move in different directions on different constructs. FATHER, DISCIPLINE, AGGRESSION, LOVE, GUILTY FEELINGS, SEX and OTHER PEOPLE have moved little.

On the first factor component, MY MATES, MOTHER, FAMILY and SELF are at the negative end of an evaluative component (Bad, Ugly, Worthless, Cruel and Awful). EXCITEMENT, LAW, POLICE, PRISON OFFICERS are at the positive end (Good, Beautiful, Useful, Kind and Nice).

On the second factor component BORSTAL TRAINING and SEX are judged to be powerful. They are rated as Unpleasant, Strong, Hard, Rugged, Masculine, Fast and Tense. SELF and MOTHER are judged to be powerless. They are rated as Pleasant and Weak, Self, Delicate, Feminine, Slow and Intense.

For/

FIG: 11.12

COMPOSITE DIAGRAM

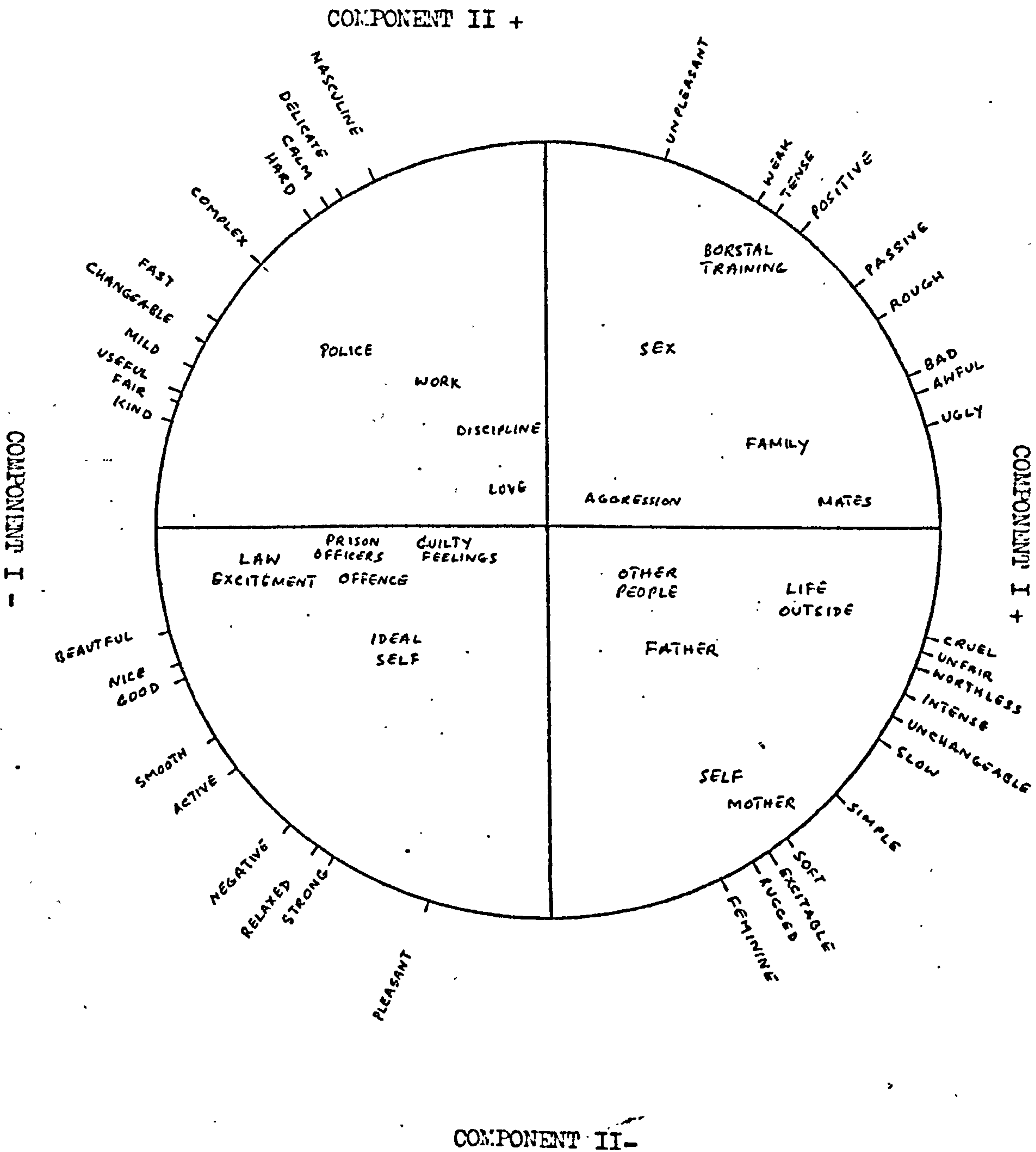
SUB-GROUP: SEX

RELATIONSHIP BETWEEN ELEMENT AND CONSTRUCT DISPERSIONS

Below Average

ON

COMPONENTS I AND II



For this group MOTHER and SELF are very close to each other and are rated very poorly. This rejection of SELF is a reflection of feelings of inadequacy and unmanliness. FATHER is close to OTHER PEOPLE and both are disliked and put at a distance from SELF. They tend to regard the authority figures (POLICE and PRISON OFFICERS) highly and the Borstal experiences are favourably acceptable. FATHER is seen as damaging, LIFE OUTSIDE is linked closely with their feelings for their family and tends to be disvalued. In contrast, their favourable judgements seem to be associated with the new relationships and emotional experiences provided in the Borstal.

SEX is seen as distant from MY OFFENCE, EXCITEMENT, GUILTY FEELINGS, and LOVE. Their original offence is not defined as sexual, rather it is defined as a diffuse expression of excitement. They would seem to have profound difficulties with their sexual identity. This group is isolated from their peer group and have no defined social role in the outside world. They respond warmly to structured experiences.

XI(5) SUMMARY OF RESULTS

The pre and post training changes in the ratings of the subgroups were analysed according to the method described in Chapter X. The subgroup results were presented for the first two components only. The subjects were classed into four different Offence groups according to their predominant and recent delinquent behaviour.

(a) Larceny Group

This group was by far the largest in the sample, and consisted mainly of "disturbed" and "inadequate" delinquents who had committed non-violent offences, mainly against property.

(b) Drug Group

The Drug group consisted of these delinquents convicted of drug offences and are considered to be addicted to drugs. Their allocation to the Borstal was primarily for the treatment of their/

their drug addiction.

(c) Aggressive Group

This group consisted of delinquents who were considered to have serious personality disorders. All the delinquents in this group had caused serious damage to property or persons, including physical assaults and bodily harm. Their allocation to a particular Borstal was due to their uncontrollable and repeated aggressive behaviour.

(d) Sex Group

This group, the smallest in number, consisted of offenders with a record of sexual offences, ranging from rape to indecent exposure.

Each of the above four groups was further divided according to three intelligence levels; "above average", "average" and "below average".

The results presented above show that Borstal Training has had a profound impact on the inmates' evaluation of the Elements used in this study. The amount of the change observed in each of the twelve subgroups was found to be significant, though different groups were found to change in different directions. Furthermore, for different groups, the Elements differed in their importance and relevance, producing characteristic group patterns and a number of similarities and contrasts between subgroups also emerged. Following is an account of the main findings of the analyses of the subgroup data. The psychological importance of the findings will be further expanded in Chapter XIII after all the results have been presented.

The groups varied considerably in the amount of change observed. The Larceny groups, on the whole, particularly the "above average" showed the largest change, while the smallest change was observed in the Aggressive group, especially the "below average" subgroup. In line with the findings of the 'total sample', most groups showed a deterioration of the Self Concept. In the "above average" Larceny group, the Element Self was seen to have become considerably weakened and ineffectual. The Ideal/

Ideal Self, on the other hand, received a more positive evaluation. In the "average" Larceny group, Self concept appeared to have become emasculated, while the Ideal Self remained positively evaluated. The "below average" group, on the other hand, showed a more positive evaluation of the Self. This improvement in the Self concept is also accompanied by a degree of uncertainty and unpredictability about its role. The Ideal Self had undergone a greater shift in the positive direction.

The Aggressive group, especially the "above average" showed a considerable deterioration in the evaluation of the Self, and yet there appeared to be a closer identification of the Self with aggressive delinquent behaviour and the peer groups. The "average" and "below average" groups showed little overall change in the evaluation of the Self and the Ideal Self. The "average" group continued to have a highly positive evaluation of the Self and the Ideal Self. The "below average" showed little change in the ratings of the Self, and the Ideal Self tended to remain more negatively evaluated and to have unmistakable masculine characteristics.

The "above average" Sex group showed a negative evaluation of the Self, but with enhanced masculine characteristics, while the Ideal Self was somewhat more positive. In terms of Self evaluation, this group was similar to the "above average" Aggressive group. The "below average" Sex group tended to rate the Self as worse and more emasculated than before. They also evaluated the Ideal Self negatively.

In the Drug group, the "above average" subgroup, in contrast to most other groups, continued to rate Self and Ideal Self somewhat favourably and the group seemed to be self confident. They now saw themselves as more easy going and their self satisfaction was striking. In this respect, this group resembled the "average" Aggressive group. The "average" Drug Group presented concepts similar to other delinquent groups in a deteriorated Self concept and little improvement in the ratings of/

of the Ideal Self. The "below average" group showed deterioration of the Self and Ideal Self.

The way in which the groups viewed their past delinquent behaviour (as seen by the changes in the ratings of the Element My Offence) also produced interesting variations. From the differential changes observed in the ratings of Elements relating to delinquency and their relationship with other emotional and social Elements, certain motivational aspects of behaviour could be elicited. Most groups, on the whole, had developed a less favourable view of their past delinquent behaviour, notably the "above average" and "below average" Larceny groups, "average" Sex group, "average" Aggressive group and "average" and "above average" Drug groups. On the other hand, groups which rated their past delinquent behaviour more favourably were "above average" Sex group and "average" Larceny group.

In some groups, delinquent behaviour and excitement seeking appeared closely linked, especially in the "average" and "below average" Larceny groups, "above average" Drugs group and "above average" Aggressive group. In the case of the Larceny groups, they seemed to see their delinquent behaviour as a means of seeking excitement. Similarly, in the "above average" Drug group, drug taking was seen as a means of seeking stimulation as well as maintaining an affinity with the peer group. For the "average" Drug group, drug taking was perhaps no more than a delinquent and antisocial act.

The "above average" Aggressive group saw Aggression as a highly desirable emotion and a potential source of stimulation and strength. They did not feel guilty about their past delinquent (aggressive) behaviour, for it was judged a truly masculine act and guilt was thought a sign of weakness. They respected the Police and Prison Officers for their hardness and other masculine attributes, and they respected aggression in others. Aggressive behaviour, for this group, seemed to provide them with a masculine/

masculine and sexual role which they did not question. The "above average" Aggressive group saw their families as ineffectual, dominated by a stronger Mother, while Father was seen as weak.

The "above average" Sex group saw Mother as the dominant parent who was seen to be more important than Father. She was somewhat idolised and seen to have a dual role. However, she was also viewed as complex and changeable and seen to have failed to provide a dependable structure. The "average" Sex group also saw a role reversal in the behaviour of the parents, in that the Father was seen as the more passive and ineffectual. The "below average" Sex group saw themselves as very close to Mother, who has a weak and feminine character. They defined a masculine role as unpleasant and tense and they saw their delinquent behaviour as passive and simple, and Borstal as hard and masculine.

For the "above average" Sex group, excitement remains a highly desirable attribute, but the delinquents in group appeared to be more concerned with their social/sexual role. Their past delinquent behaviour had been a means to acquire a highly desirable attribute of masculinity as well as excitement. However, there was some indication to suggest that, since their past behaviour had been unsuccessful in achieving the aims, they wished to be more gentle and more likeable than before.

Delinquent behaviour as a means of self assertion was also seen by the "average" Sex group. Past delinquent behaviour was judged as desirable and it would seem that by behaving 'badly' they would acquire a somewhat masculine identity and a sex-orientated role.

The "below average" groups in all the four offence categories had some striking similarities. Almost all of them seemed to prefer safe and structured life styles. They showed a respect for Borstal and admiration for authority figures. The "below average" Larceny group delinquents were more positively disposed to a benevolent authority figure who was masculine and strong as well as understanding. The "below average"

average" Drug group tended to be rather passive-dependent and regressive in relation to authority figures. They would respect and admire authority (Father) figures if they felt emotionally close to them. Showing a more favourable evaluation of Prison Officers, this group felt that Borstal had given them a sense of masculine identity and by going through a period of Borstal training, it would seem they had achieved something worthwhile. Similarly, the "below average" Aggressive group showed a greater regard for structure and authority and, like the "below average" Sex group, they respected authority figures like the Police and the Prison Officers.

The groups who actively resented authority, discipline and structure were the "average" Larceny group who could be said to have strong delinquent identification, with little emotional closeness with other people, and little sense of guilt. Their behaviour seemed to be guided by excitement-seeking, an attribute they valued above everything else.

In this section, the main findings in changes in the ratings of subgroups were presented with particular reference to similarities and differences between different groups. The above presentation shows that Borstal training affects different types of delinquents (in this case classed according to Offence and Intelligence) differently. Furthermore, emotional aspects of delinquent behaviour in terms of excitement-seeking, role-seeking and structure-seeking and the affect of Borstal on the Self concept have been pointed out. After a further analysis of the Self-Identity systems in the next chapter, the theoretical implications of the result will be discussed.

CHAPTER XII

RESULTS: (D)

SELF-IDENTITY SYSTEMS

Norris and Norris (1976) describe^a method derived from the Repertory Grid Technique to examine how a person identifies himself as similar to some and different from^{other} elements. The method is based on the Element-distance^{*} given in Slater's INGRID Programme for the analysis of Grids. The programme gives distances between any pairs of elements as a ratio of the expected distance between all pairs of elements in a grid. This measure has a minimum of zero, mean of 1, and it seldom exceeds 2. Element pairs with a distance close to zero are seen as being similar, with a distance close to 2, as being dissimilar and with a distance close to 1 as being neither similar nor dissimilar, but indifferent.

XII (1) THE SELF-IDENTITY PLOT

The procedure is to plot all elements on two orthogonal axes defined by the 'actual self' and 'ideal self', with axes intersecting at 1. By looking at the distances from 'self' and 'ideal self' simultaneously using the two axes, we obtain what is referred to as a 'self identification plot'. Elements at distances close to 1, on both axes, do not contribute to this self identification in that they are neither like nor unlike either actual nor ideal self.

Self and ideal self are defined in terms of 'similarity' and 'dissimilarity' to other elements. Quite often an element is defined in 'monocular' fashion, identifying only the similarity or the dissimilarity of the self dimension with other people. In subjects complaining of behavioural constraints associated with neurosis, definition of 'self' by dissimilarity is quite common (Norris and Norris, 1976).

If 'self' or 'ideal self' is defined in terms of what it is not rather than in terms of what it is (no element within the/

^{*}The distance between two elements is expressed proportionately to the Unit of expected distance - the observed difference on a construct system between all possible pairs of elements.

the distance of 0.8), 'self' is said to be isolated and consistently separated from other people. It is said to show a lack of sharing thoughts or feelings with other people and a lack of social interaction. When 'self' and 'ideal self' are shown to be unlike other^s, and wanting to be unlike others, it is called 'social alienation' and when 'self' and 'ideal self' are very dissimilar (i.e. separated by a distance of more than 1.2) and mutually defined in opposition to each other, such alienation is said to have taken place. Self alienation, together with self isolation, is found in obsessional, depressive and anxious neurotics and in alcoholics. An individual representing himself as being not only the opposite of what he wants to be, but also opposite to what he sees in his environment.

Self congruence is defined by a similarity between 'self' and 'ideal self' (distance less than 0.8). This indicates that the individual is just as he wants to be and does not desire to change. It is commonly observed in social deviates, drug addicts and personality disorders indicating low willingness to change.

Self identity plots for each of the twelve sub groups were worked out according to the method described above. For practical purposes the central area between 0.8 and 1.2 on both dimensions, is marked. Elements within these limits are close to the average of all element distances and being neither similar nor dissimilar to either 'self' or 'ideal self', and they are not regarded as contributing significantly to the identity plot.

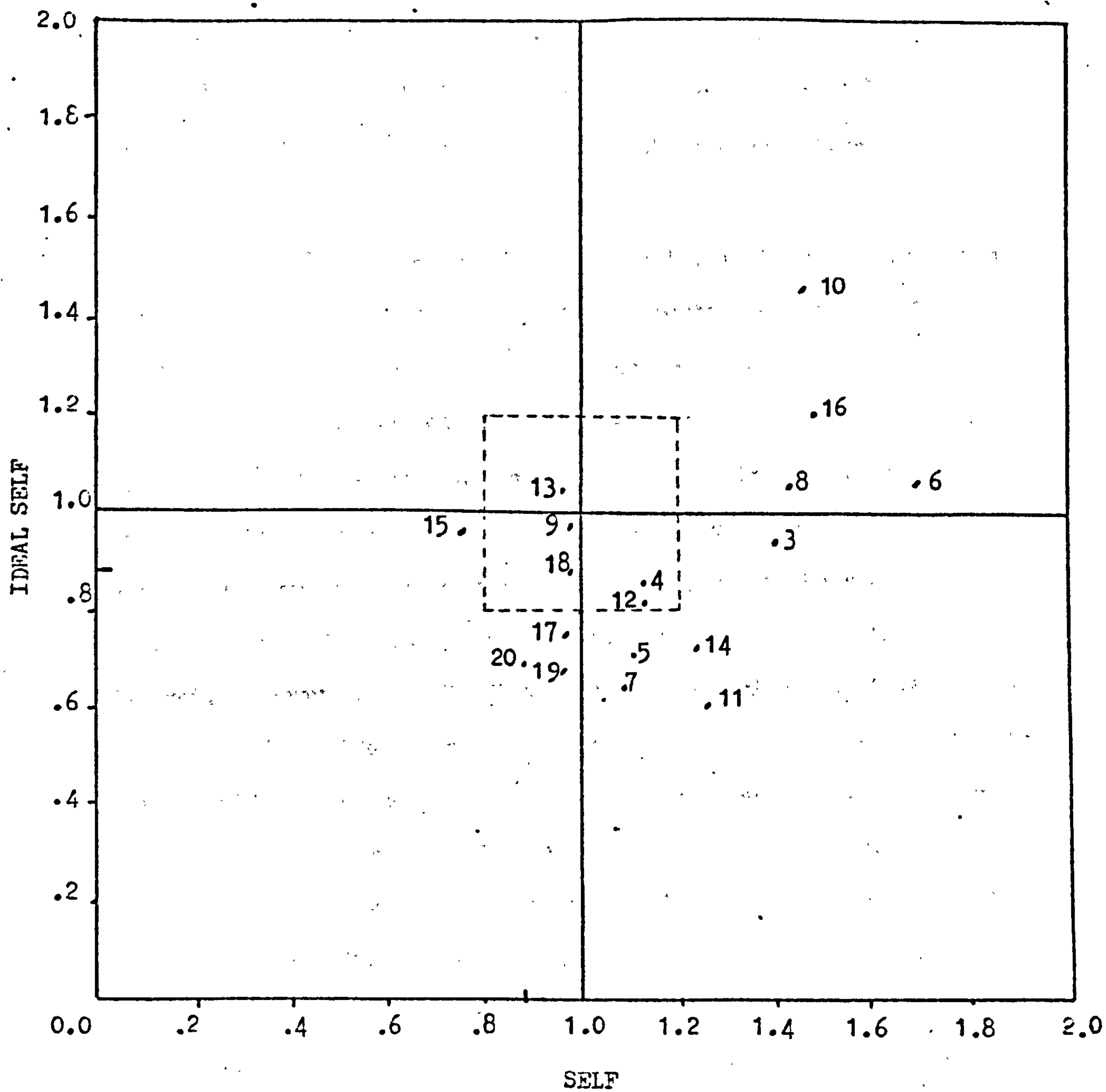
XII (2) THE SELF-IDENTITY PLOT: THE TOTAL SAMPLE

The results of the self-identity plot for the whole sample prepared according to the method described above are presented in Fig.12.1. The only element close to 'self' (at a distance of less than 0.8) is the element 'my offence'⁽¹⁵⁾. The absence of any other element close to 'self' is indicative of an isolation of the 'self' from/

FIG. 12.1

SELF IDENTITY PLOT

TOTAL SAMPLE.



from others and that 'self' is seen only in terms of the offence.

Moreover, 'self' is mainly seen in terms of what it is not, as shown by a large distance (more than 1.2) from 'self'. Self is dissociated from 'Borstal Training' (16), Discipline (6), Law (8) and Father (3).

The 'Ideal Self' on the other hand is close to 7 elements, indicating a wish to be identified with Love (11), Sex (14), Life outside (2), Family (5), Police (7), Work (19) and Mates (17). Both 'Self' and 'Ideal Self' are distanced from the element 'Aggression'.

XII (2) (i) Discussion:

The self-identity plot for the whole group indicates the isolation of the 'Self' from other important elements. The delinquent behaviour and their delinquent role as denoted by their offence. However, the position of some elements the 'Ideal Self' show that they have a wish to be like their Mates, Family and the Police. A successful identification with peers and with authority figures would provide a different, but perhaps a more successful social role. Life outside, Love and Sex are highly desired, to provide satisfactory emotional experiences. However, the isolation of the 'Self' indicates that they lack the necessary skills which would enable them to share thoughts and feelings with others, and provide an opportunity for satisfactory social interaction.

The group tends to define 'Self' mainly in terms of what it is not. The salient attributes of 'Father', 'Law', 'Discipline', 'Borstal Training' are unlike the salient attributes of the 'Self'. 'Aggression' is the only element which is unlike the 'Self' and they do not wish to be associated with it either.

XII (3) THE SELF-IDENTITY PLOTS: THE SUB-GROUPS

The following are the result of the Self-Identity Plots for each of the twelve groups./

groups.

XII (3) (1) LARCENY

- a) Above average. Fig 12.2 represents self-identity plots (based on the Grid of Differential Changes) for the Larceny Above Average Group. As can be seen, only "love" (11) lies close to 'ideal self', while no element lies significantly close to 'self'. According to their operational definition Norris and Norris described this feature as 'social alienation' i.e. there are no more than two non-self elements within a distance of 0.8 from either 'self' or 'ideal self'. Another salient feature of the plot is that both 'self' and 'ideal self' are defined in terms of what they are not, by differentiating them from most other elements. 'Self' and 'ideal self' are differentiated from other elements like 'my offence' (15), 'borstal training' (16), 'other people' (18), 'law' (8), 'the police' (7), 'aggression' (10), 'guilty feelings' (13), 'excitement' (12), 'prison officers' (9) and 'mother' (4).

The group is personally and socially isolated, denoting severe depression. The closeness of 'love' to 'ideal self' indicates a strong need for affection, both 'self' and 'ideal self' are dissociated from all aspects of delinquent behaviour and delinquent sub-culture, with a marked lack of sharing thoughts and feelings with other people.

- b) Average. Fig.12.2 represents the self-identity plot of larceny average group. Elements which lie close to 'self' and 'ideal self' are 'borstal training' (16), 'work' (19), 'life outside' (20), and 'mother' (4) while 'law' (8), 'the police' (7) are close to 'self' only. 'Ideal self' is differentiated from 'prison officers' (9), 'other people' (8) and 'guilty feelings' (13).

This group sees itself more in terms of structured/

FIG. 12.2
SELF IDENTITY PLOT

SUB GROUP
LARCENY
Above Average

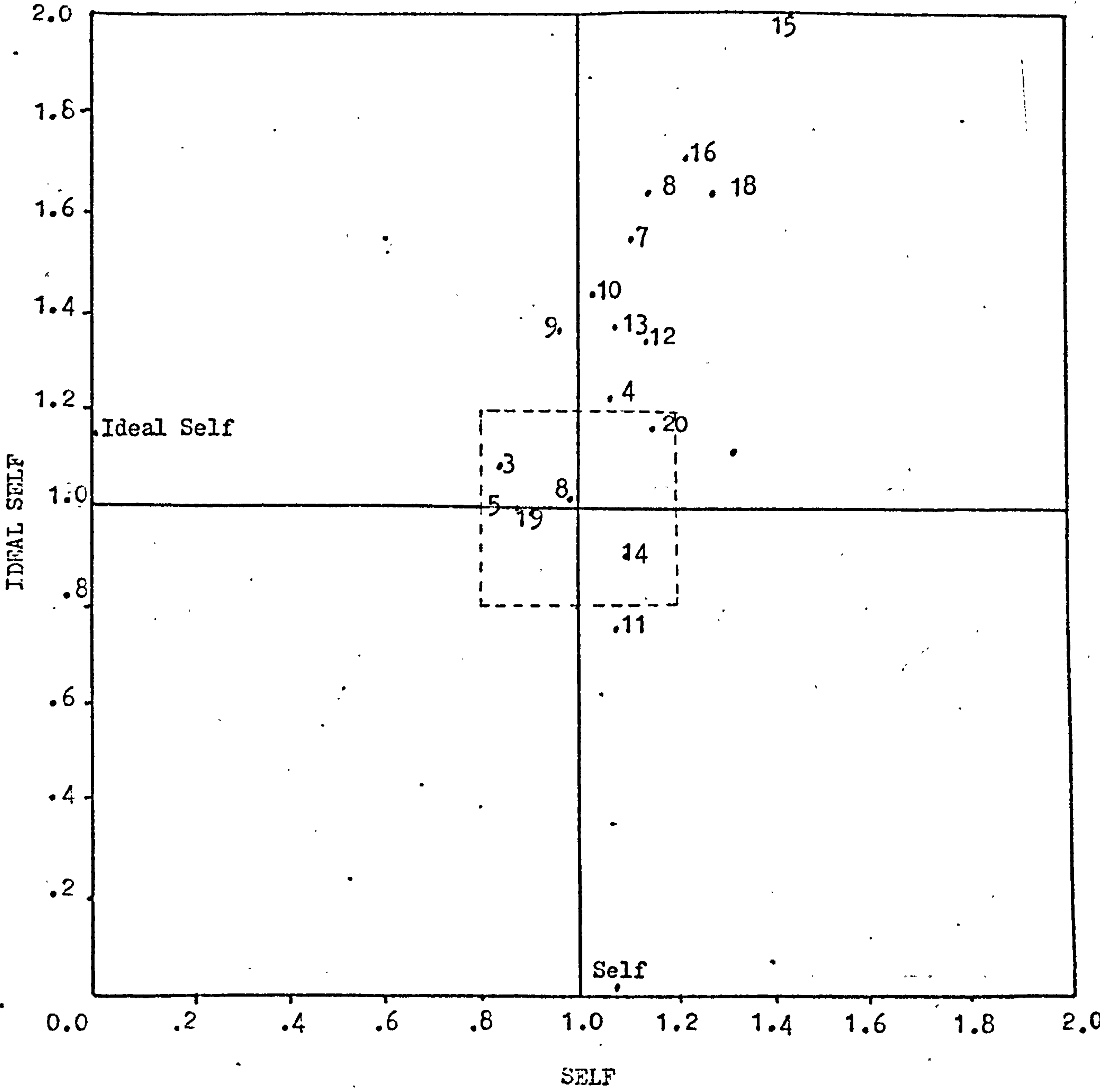


FIG. 12.3
SELF IDENTITY PLOT

SUB GROUP
LARCENY
Average

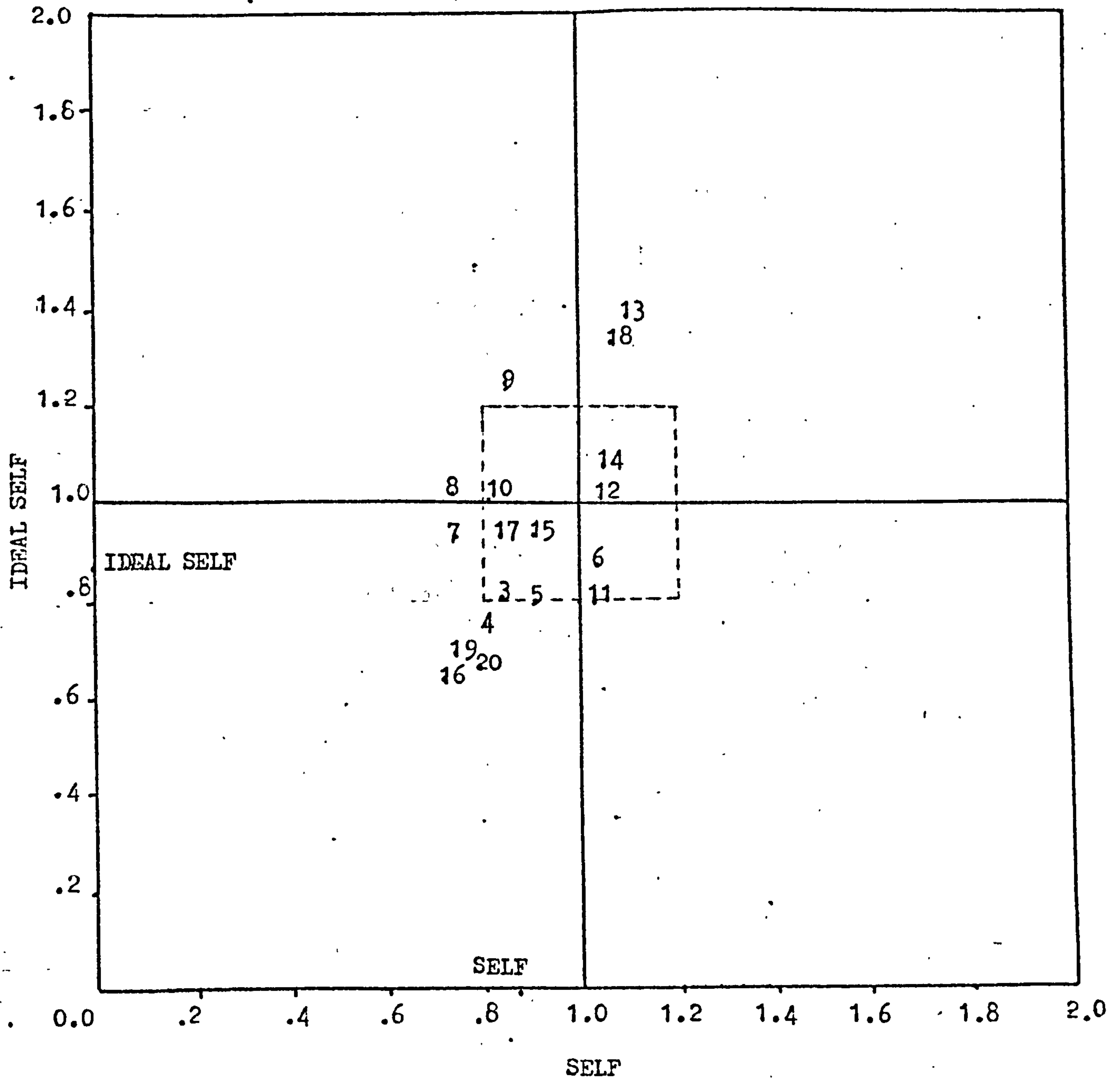
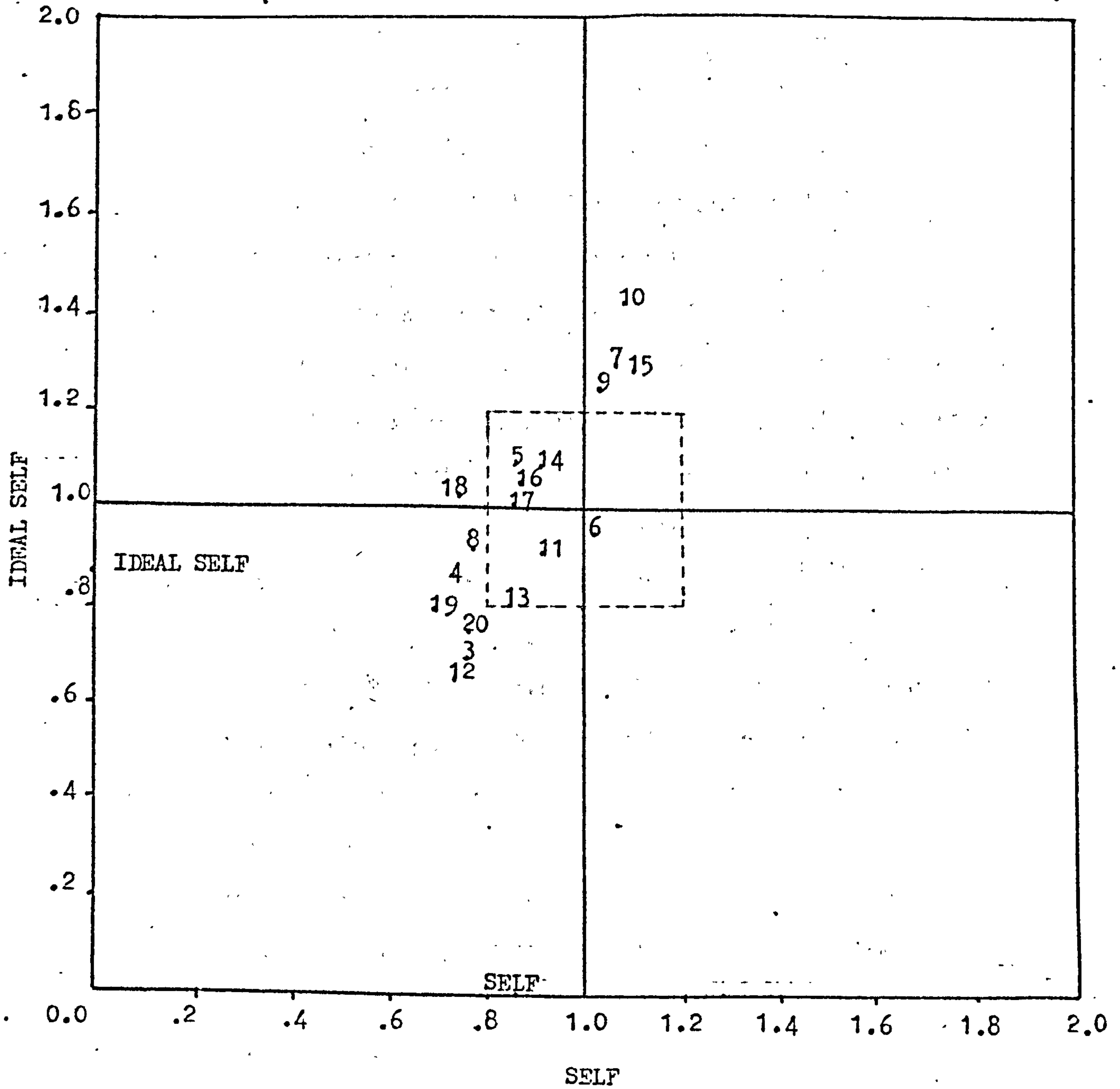


FIG. 12.4
SELF IDENTITY PLOT

SUB GROUP
LARCENY
Below Average



structured reality as provided by Borstal training, work and life outside. Both 'self' and 'ideal self' close to 'mother' and authority figures like the police. However, they wish to be unlike prison officers. 'Ideal self' is also dissociated from other people in general, perhaps due to lack of social skills.

- c) Below Average. Fig. 12.4 represents 'self' and 'ideal self' similar to 'excitement' (12), 'father' (3), 'life outside' (20), 'work' (19). 'Law' (8), 'people' (18) are close to 'self'. 'Ideal self' is differentiated from 'aggression' (10), 'police' (7), 'prison officers' (9) and 'my offence' (15).

The group shows strong affinity with parents and elements relating to socialisation, (e.g. 'life outside' and 'people'). There is a strong desire to identify with 'father'. The group does not wish to be seen in terms of their delinquency 'aggression' and authorities like the police. Excitement, for this group remains a highly desired attribute.

XII (3) (ii) DRUG

- a) Above average. Fig. 12.5 shows that 'self' and 'ideal self' are approaching congruence. There are only two elements, 'excitement' (12) and 'mates' (17) near 'self' and 'ideal self', indicating lower isolation. The 'ideal self' is dissociated from 'my offence' and 'Borstal training' and 'discipline'. Since there are only two elements close to 'self' or the 'ideal self' the group is considered socially isolated. 'Excitement' is strongly desired as an element and the group strongly identifies with other drug addicts. There is a strong desire to be differentiated from behaviour labelled as delinquent and those constraints put on delinquent behaviour.

- b) Average. Fig. 12.6 'self' is closer to 'police' (7), while 'ideal self' is close to 'life outside' (20), 'aggression' (10), 'mates' /

FIG. 12.5
SELF IDENTITY PLOT

SUB GROUP
DRUGS
Above Average

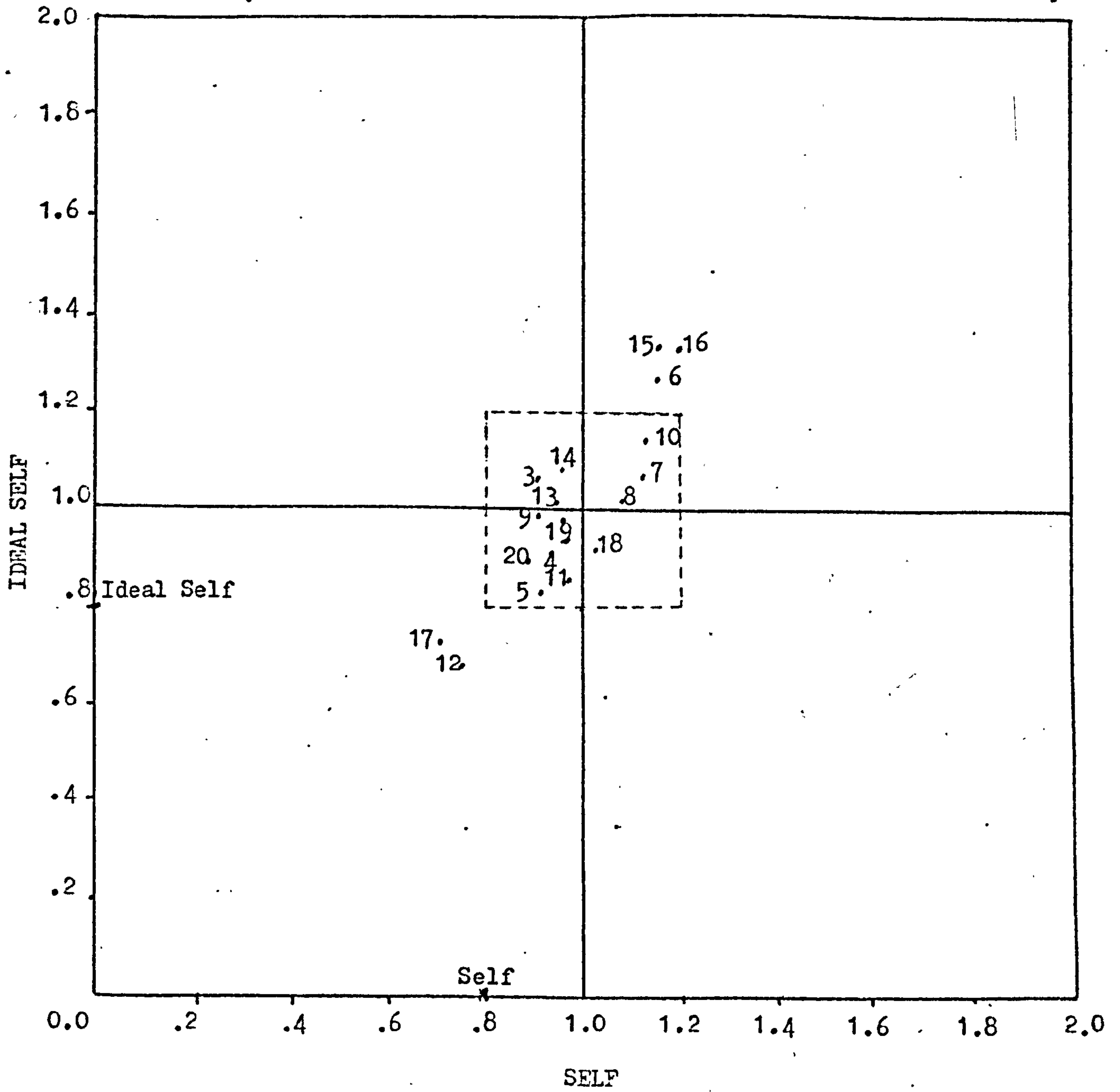


FIG. 12.6
SELF IDENTITY PLOT

SUB GROUP
DRUGS
Average

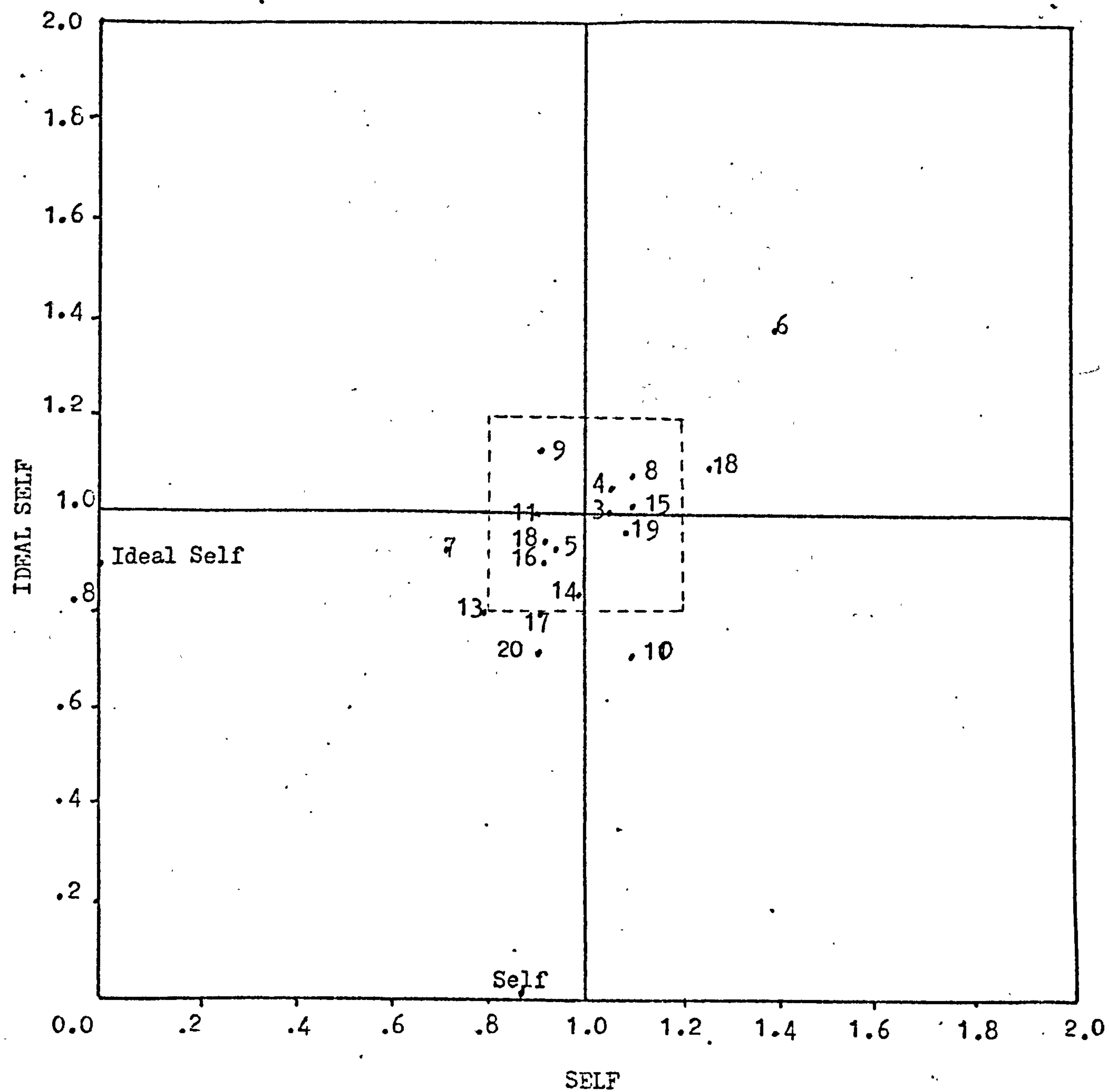
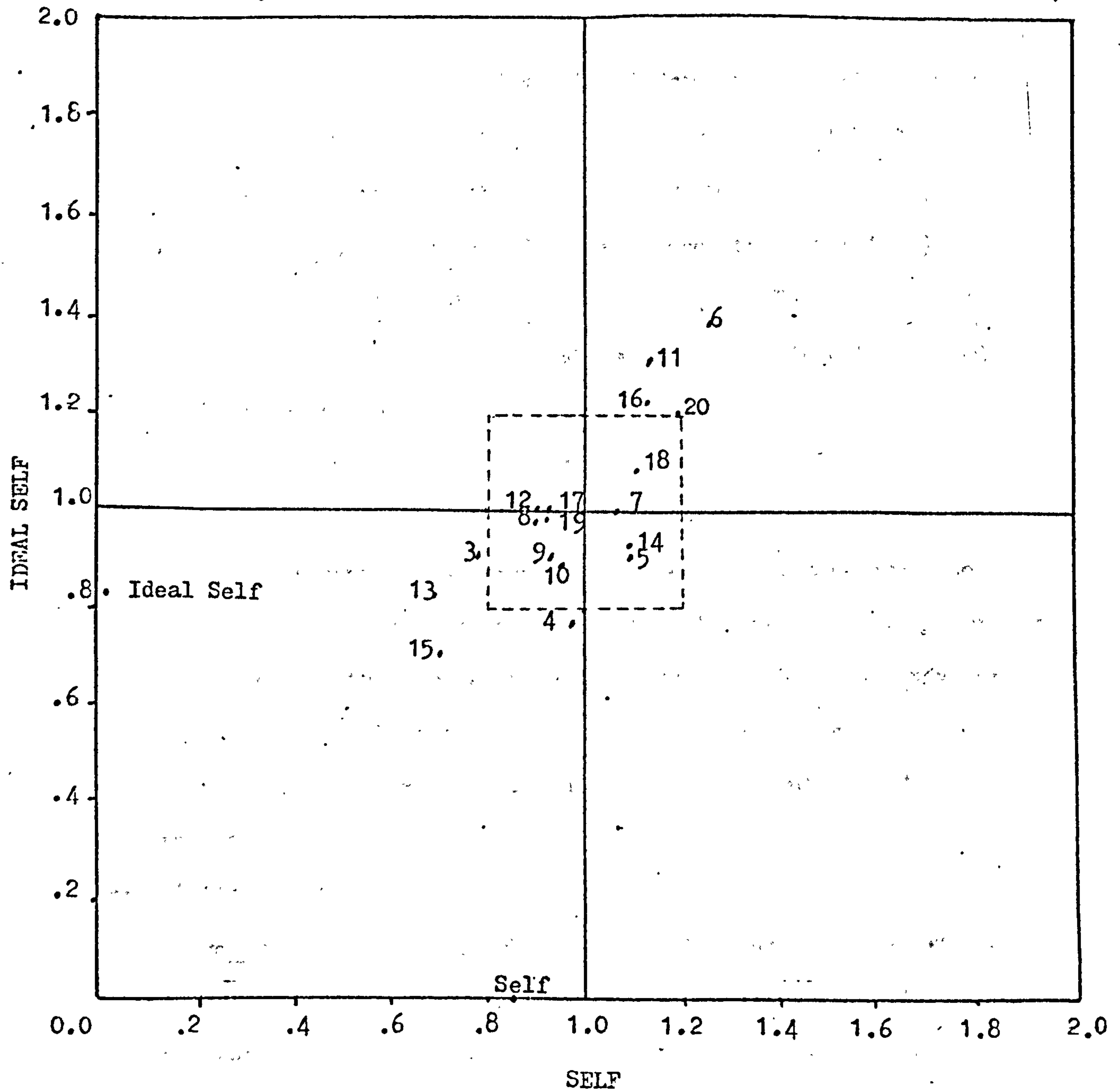


FIG. 12.7
SELF IDENTITY PLOT

SUB GROUP
DRUGS
Below Average



'mates' (17). 'Self' is differentiated from 'other people' (18).

'Self' and 'ideal self' are differentiated from 'discipline' (6).

'Ideal self' is very closely associated with the delinquent and 'life outside' and 'aggression'. The plot indicates a strong desire to acquire a masculine role through aggressive behaviour. Discipline is dissociated from 'self' and 'ideal self'. 'Self' is dissociated from other people. Strong identification delinquents regarding other people to ensure power and authority is shown by this group.

- c) Below average. Fig.12.7 'Self' is closer to 'father' (3) than 'ideal self' is closer to 'mother' (4). Both 'self' and 'ideal self' are close to the elements like 'offence' (15) and are differentiated from 'discipline' (6). 'Ideal self' is distanced from 'love' (11), 'Borstal training' (15) and 'life outside' (20). The identity plot shows a socially isolated and emotionally constricted group. They see themselves more like 'father', but they wish to be more like 'mother'. They apparently have accepted their role in terms of their delinquent behaviour (drug taking). Discipline and other constraints are not liked, love is, in fact, rejected, indicating the "burnt child" response.

XII 3 (iii) AGRESSIVE

- a) Above average. Fig.12.8 shows that 'self' and 'ideal self' are seen as congruents and significantly close to 'father' (3), 'mates' (17), while 'ideal self' is also close to 'law' (8), 'life outside' (20) and 'work' (19), and 'guilty feelings' (13). 'Self' is differentiated from 'other people' (18) and 'excitement' (12). 'Self' and 'ideal self' are seen as congruent, and there appears to be no desire to change. The group is isolated personally though there is a close identification with 'father' /

FIG. 12.8
SELF IDENTITY PLOT

SUB GROUP
AGGRESSIVE
Above Average.

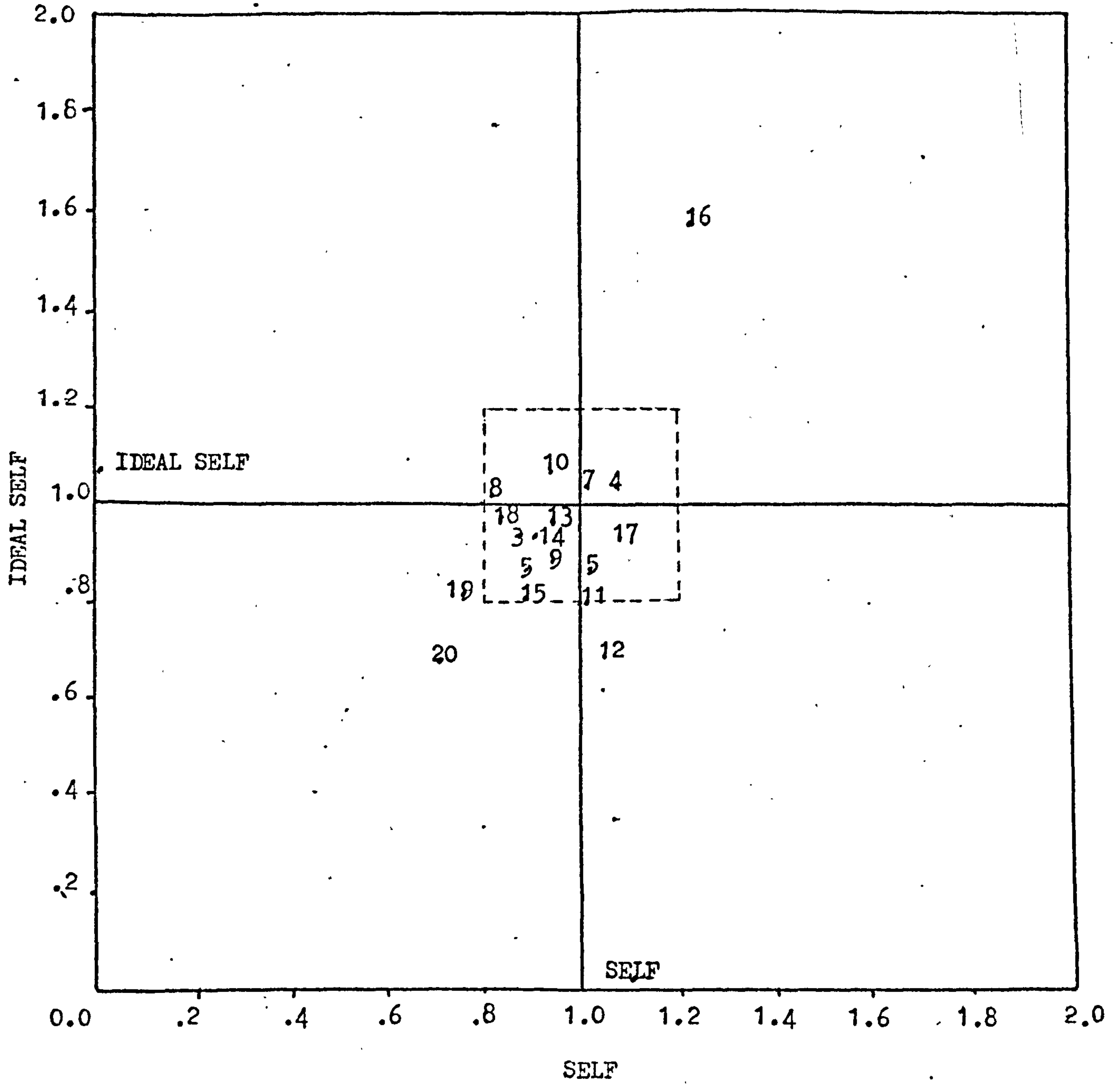


FIG. 12.9
SELF IDENTITY PLOT

SUB GROUP
AGGRESSIVE
Average

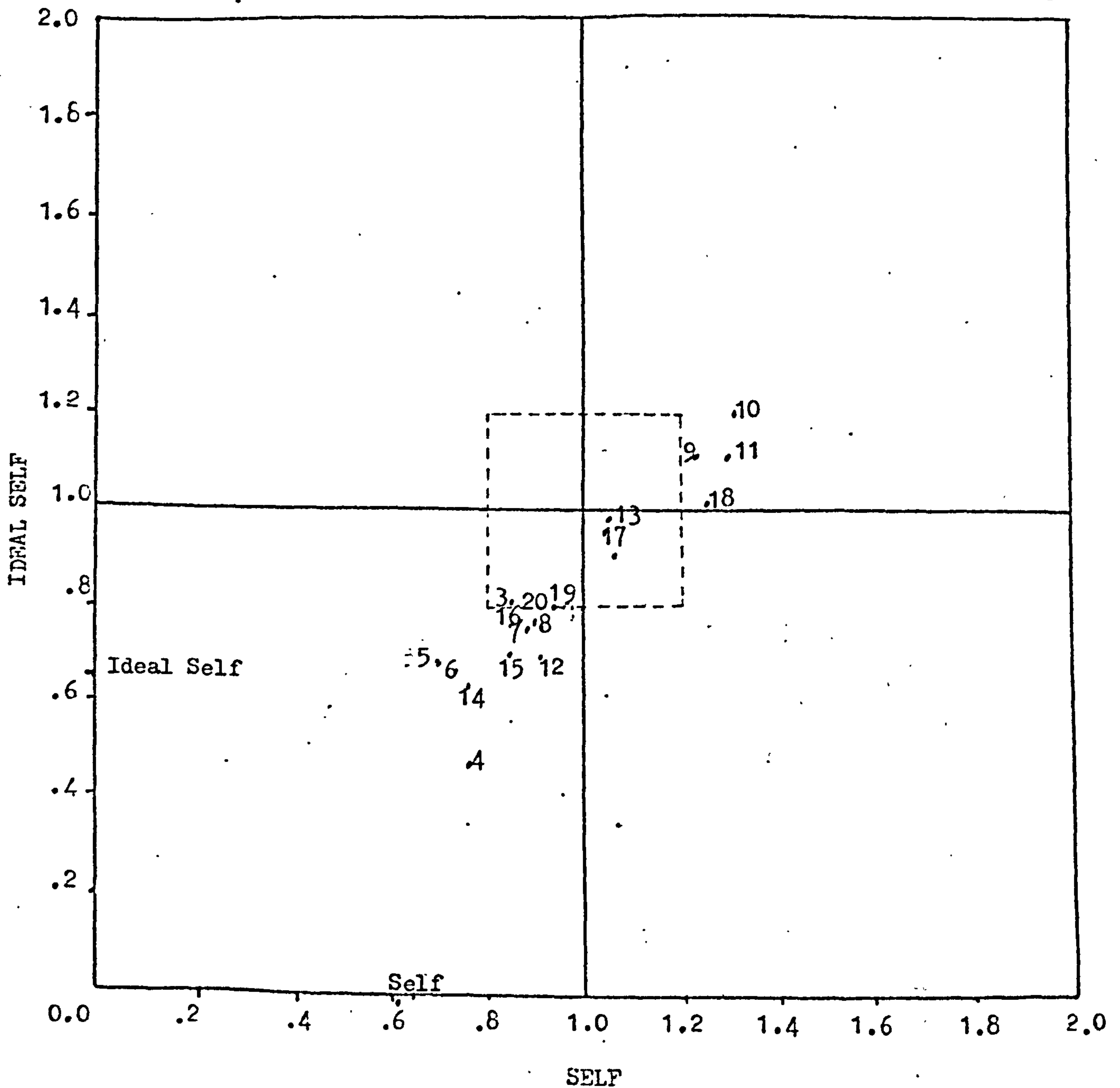
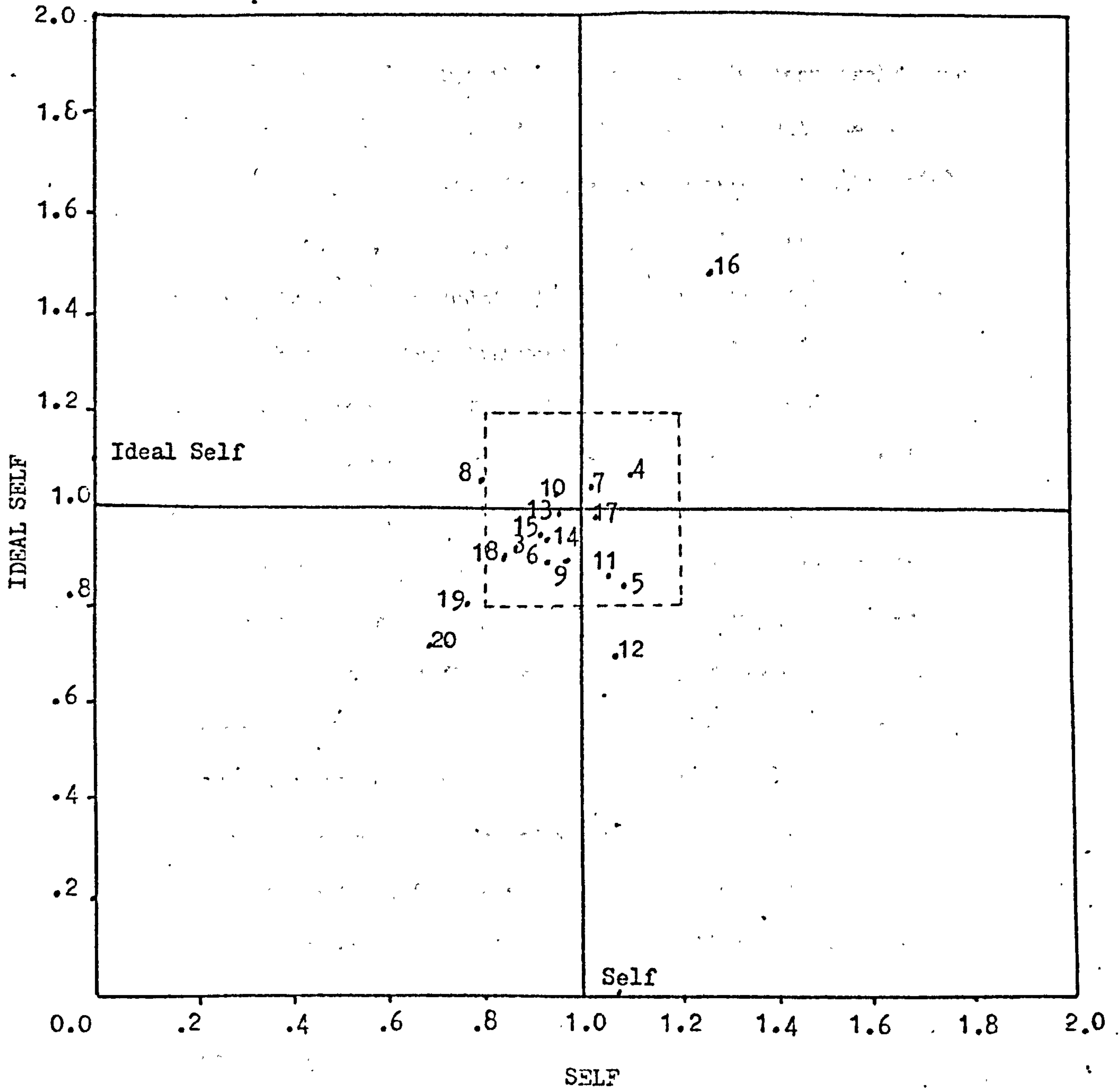


FIG. 12.10
SELF IDENTITY PLOT

SUB GROUP
AGGRESSIVE
Below Average



'father' and other delinquents. There is a greater wish to have a well structured life, to abide by the law and have a conscience. The dissociation of 'self' from 'excitement' and 'other people' is taken as an indication what these emotions and social relationships may have meant to their delinquent behaviour.

- b) Average. Fig.12.9 shows that the distance between 'self' and 'ideal self' is above 0.7, indicating a similarity between the two. 'Self' and 'ideal self' are very close to 'family' (5), 'discipline' (6), 'Sex' (14). 'Ideal self' is close to 'mother' (4), 'my friends' (15) and 'excitement' (12). 'Self' is differentiated from 'aggression' (10), 'law' (8), 'love' (11), 'prison officers' (9) and 'other people' (18). The average aggressive group shows a congruence between 'self' and 'ideal self' indicating little desire to change. They are as they wish to be. They see themselves as primarily delinquent. There is a close identification with 'mother' and 'family' and 'self' is dissociated from emotions like 'aggression' and 'love'. It is also differentiated from 'people', particularly from those with masculine roles like 'prison officers'. Progressive attitudes with 'feminine' identification are indicated in the self identity plot. Delinquent behaviour may be seen as providing the emotion of excitement that the group is looking for.

- c) Below average. Fig.12.10 shows that there are no more than two elements close to 'self' or 'ideal self'. 'Ideal self' here, is close to 'outside life' (20) and excitement (12), while 'self' is close to 'work' (19). Both 'self' and 'ideal self' are very strongly differentiated from 'Borstal training' (16). The group is socially isolated and the isolation leads to a/

a close identification of the actual self with excitement and the outside world. This indicates a strong desire to seek exciting experiences in the outside world; at the same time, they do not want to be subjected to any outside constraints.

XII (3) (iv) SEX

a) Above average. Fig. 12.11 shows the 'self' and 'ideal self' are separated by a distance of more than 1.2, indicating that 'self' is alienated. The only two elements less than 0.8 distant were 'self' or 'excitement' (12) and 'life outside' (20). 'Self' is at a distance from 'discipline' (6), 'police' (7) and 'law' (8). 'Ideal self' is distanced from 'aggression' (10). The group is personally and socially alienated as shown by the large distance between what they see as themselves and what they wish to be. The two elements close to self indicate excitement seeking behaviour in the world at large without any social or legal constraints. 'Aggression' is one element that the group does not wish to be identified with.

b) Average. Fig. 12.12 shows that 'self' and 'ideal self' are less than 0.8 distanced from each of them. There are no elements less than 0.8 distance from 'self'. However, the five elements which are less than 0.8 distance from 'ideal self' are 'aggression' (10), 'other people' (18), 'sex' (14), 'guilty feelings' (13) and 'mates' (17). 'Self' is seen as dissimilar to 'family' (5), 'law' (8), 'my friends' (15). Both 'self' and 'ideal self' are seen dissimilar to 'father' (3), 'Borstal training' (15).

'Self' and 'ideal self' are congruent, while 'self' is personally isolated. The position of elements and 'ideal self' indicates a strong desire to be like other people, particularly other delinquents. This may be why in their masculine assertive/

FIG. 12.11
SELF IDENTITY PLOT

SUB GROUP

SEX

Above Average.

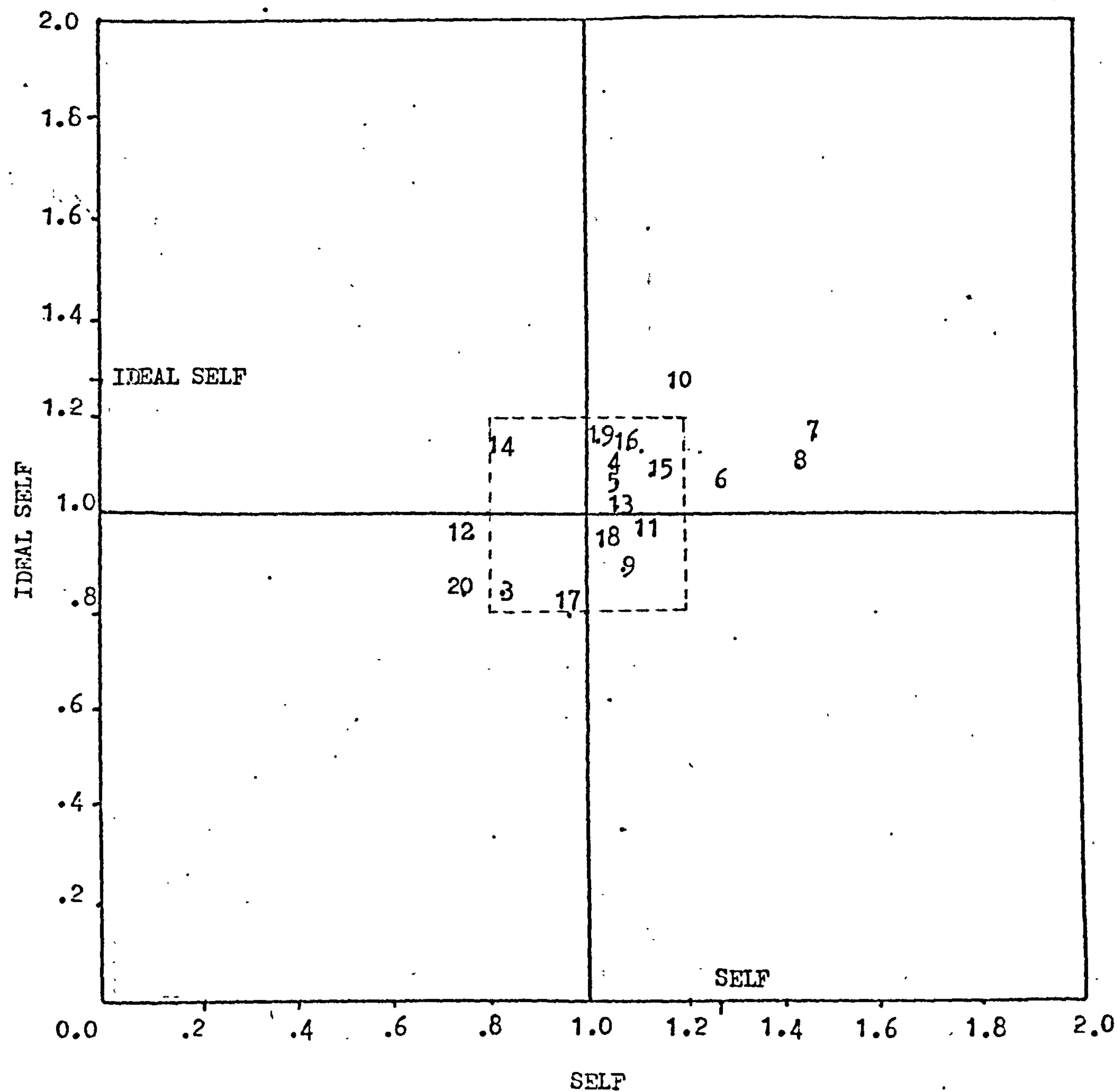


FIG.12.12
SELF IDENTITY PLOT

SUB GROUP
SEX
Average

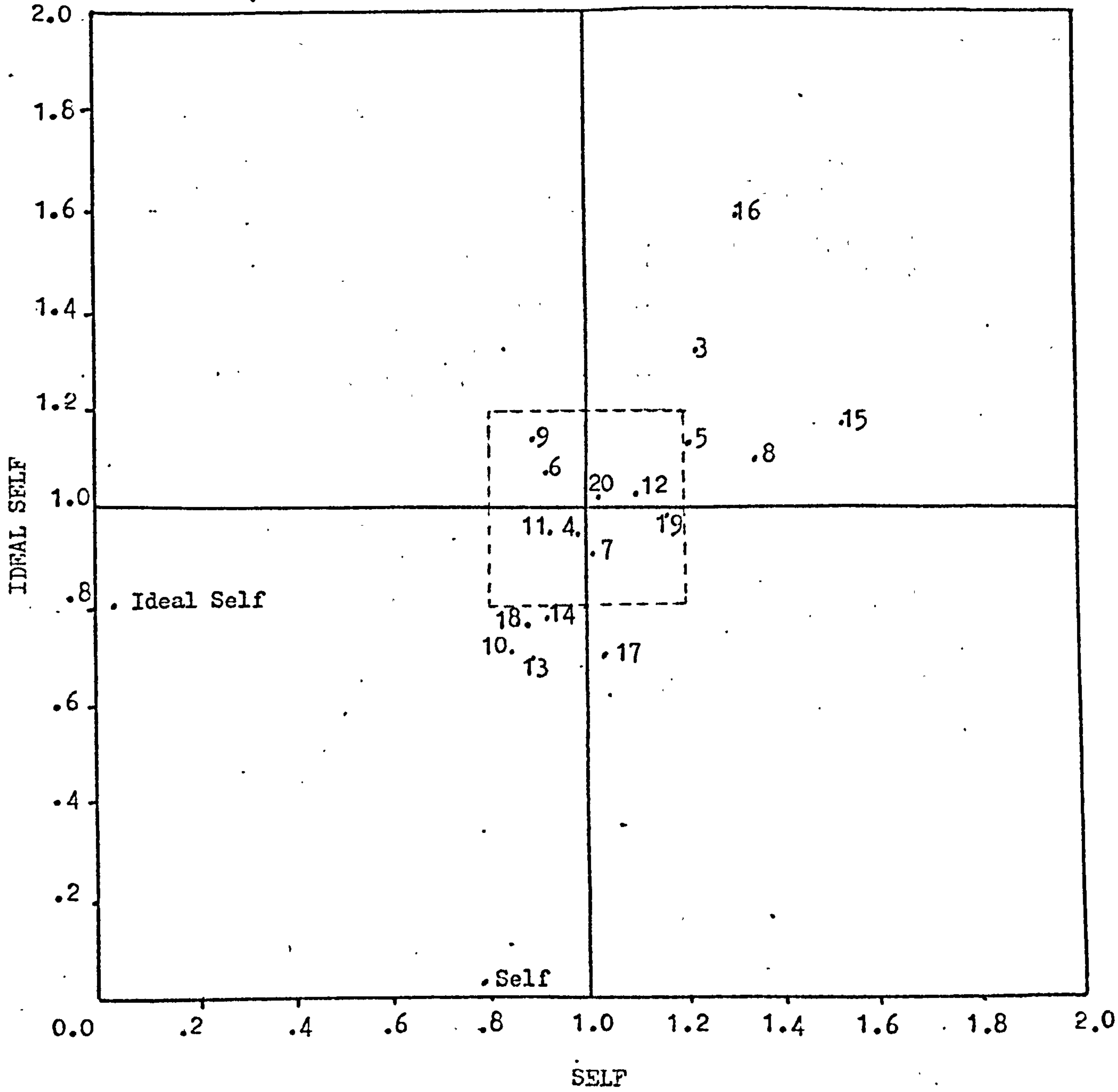


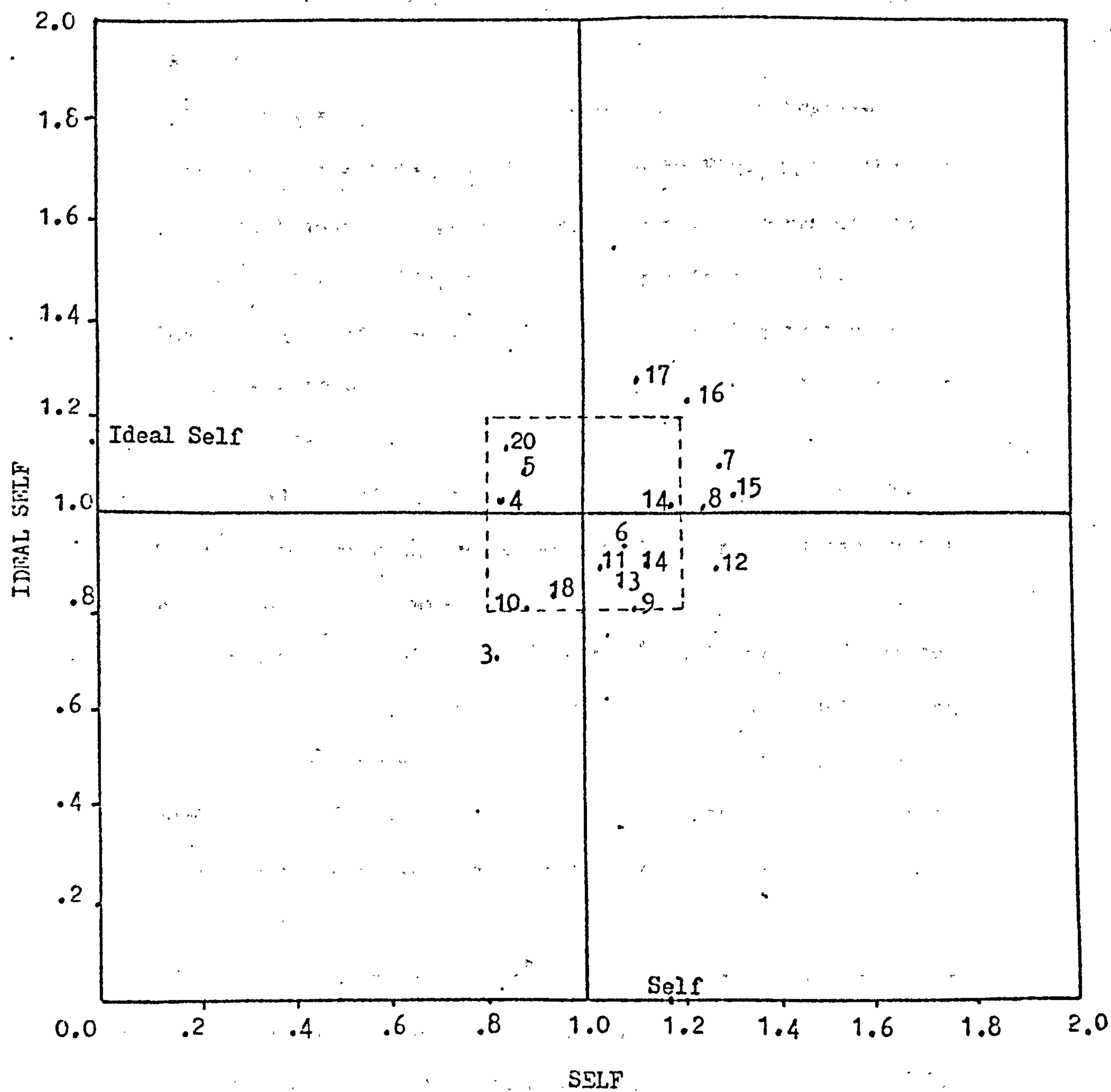
FIG. 12.13

SELF IDENTITY PLOT

SUB GROUP

SEX

Below Average



assertive sexual role, 'self' is dissociated from 'my offence', which may, in fact, be a means to assert one's own sexual role. 'Family' and 'father' are close to each other, but unlike self and a strong rejection of 'father' as ideal, is indicated. 'Borstal training' is seen as a serious obstacle in constraint in doing what they want to do, i.e., to adopt a masculine assertive role.

c) Below average. Fig.12.13. Only one element 'father' (3) is close to the 'ideal self' as shown by Fig.(12.13) There is no element near self which is seen mainly in terms of what it is not. 'Police' (7), 'law' (8), 'my offence' (15), 'excitement' (12) are seen strongly dissimilar to the 'self', while both 'Borstal training' (16) and 'mates' (17) are seen distanced from the 'ideal self'.

'Self' and 'ideal self' are isolated from other elements. There is a strong desire to be like 'father' as shown by the closeness of the element to the 'ideal self'. 'Self' is dissociated from delinquent behaviour, authority and excitement, the last, perhaps, because it is associated with delinquency. There is a strong wish to be unlike other delinquents, and perhaps identification with 'father' may be seen as a way to dissociate themselves from the delinquent sub-culture.

XII (4) SUMMARY

In this section, the results of the self-identity plots have been presented. The results have also been interpreted in terms of the self-identity of the sub-groups as denoted by the distance of the elements from 'Self' and the 'Ideal self'. Although the elements were supplied to the subject and not elicited in the classical grid approach, the findings do show marked individual differences in the way they see themselves in relation to 18 other elements. The/

The results of the "self identity" system, (Norris & Norris 1976) for the subgroups show that, in the Total Sample

- (a) The Self-identity of the group is marked by isolation from other elements considered to be personally and socially important.
- (b) The 'Offence' is the only element close to 'Self', indicating a delinquent self-identity.
- (c) 'Self' is also defined and differentiated from other elements mainly in terms of what it is not.
- (d) The closeness of 'Ideal Self' with some of the elements, e.g. 'Mates' and 'The Police' is indicative of a wish to identify with them.

The self identity system of the sub-groups produced marked group differences. The salient findings are as follows:-

- (a) In the 'Above Average' Larceny sub-group, 'Self' and 'Ideal Self' are the most isolated. 'Love' is the only element close to the 'Ideal Self' while most other elements are dissociated from it, particularly the past delinquent behaviour ('Offence').
- (b) In the 'Above Average' Drug sub-group, 'Self' and 'Ideal Self' are close to only two elements, namely 'Excitement' and 'Mates', while 'Offence', 'Borstal Training' and 'Discipline' are dissociated from them.

In the 'Below Average' Drug sub-group, the element 'Offence' is close to 'Self' and 'Ideal Self'.

- (c) In the 'Above Average' and 'Below Average' Aggressive sub-groups, 'Ideal Self' is close to 'Excitement' and the 'Life Outside', and dissociated from 'Borstal Training'.

- (d) In the 'Above Average' Sex sub-group, 'Self' and the 'Ideal Self' are incongruent. 'Self' is close to 'Excitement' and 'Life/

'Life Outside'.

(e) In the 'Below Average' Sex sub-group, 'Self' and 'Ideal Self' are congruent and distanced from 'Offence'.

(f) In the 'Below Average' Sex sub-group, 'Self' is isolated and dissociated from 'Excitement' and 'Offence'. 'Father' is placed close to 'Ideal Self'.

The significance of the findings of the Self Identity System will be incorporated in the next Chapter on 'Discussion of Results'.

CHAPTER XIII

DISCUSSION OF RESULTS AND IMPLICATIONS OF THE FINDINGS

The test re-test differences in the ratings of Borstal trainees have been presented in Chapters X and XI. The results clearly suggest that Borstal experiences have had a profound effect on the attitudes and perceptions of the delinquents in this study. Taking the whole group of 109 subjects together, the overall change in their responses to certain important aspects of their lives has been significant. From the magnitude and the direction of differential changes between the pre- and the post-training ratings and the inter-relationship between the elements and the constructs, there emerged a consistent picture of the 'psychological world' of the delinquent. A similar examination of the sub-group data showed marked group differences suggesting a differential effect of Borsals on different 'types' of delinquents.

In this chapter, an attempt is made to infer the psychological importance and relevance of the findings for both the Borstal and its trainees. The question of general interest is 'How does Borstal training affect this group of psychiatrically disturbed delinquents?' Specifically, to what extent does Borstal training succeed in achieving its aims and objectives as set out in Chapter I? The discussion of results that follows is presented in two parts; the first part deals with the overall effect of Borstal training on the total sample, taken as a whole, and the second deals with the differential effect of Borstal training on different sub-groups within the total sample.

XIII (1) DISCUSSION OF RESULTS: THE TOTAL SAMPLE

Among the most striking features of the test re-test changes observed in the total sample was the rather large change in the rating of the Self-image. This change has taken place mainly in an unfavourable direction. The worsening of the self concept is an important/

important finding, not only because of the magnitude and the direction of the change, but also because of the close cognitive relationship between the concept of the self and the acquisition and sustenance of anti-social and delinquent behaviour (Hall 1966, Ferrell and Nelson 1978, Reckless and Sindwani 1974, Mootori 1963, Engel 1959, Marks, 1966, Berman 1976). The change in the Self image of the group occurred mainly in terms of its functional importance as denoted by the second factor component (Table 10.5 and Fig. 10.22).

At the end of the Borstal training the delinquents now saw themselves essentially as ineffectual, weak and vulnerable. The functional importance of the Self, the sense of masculinity and feelings of confidence were severely undermined. The manly facade, which they were once able to put up was broken and they were left with a deep sense of dejection and derogation. They became socially and personally isolated, distant even from their delinquent peers, though they still saw themselves as delinquents. Their delinquent behaviour still appeared to be the most representative and salient feature of the Self (Fig. 12.1). Poor evaluation of the Self and a sense of impotence could also be taken as indications of acute dysphoric feelings. The feelings of depression were apparent, not only in their self reproach, but also in a more intensely felt sense of guilt. The delinquents saw themselves reverting to the same old patterns of life after discharge, and they anticipated the future to be marked by pointlessness and aimlessness. Perhaps an inadequate and anti-social manner remained the only way in which they could express themselves. It seemed that Borstal training had made them more aware of their failings without necessarily teaching them new skills through which to reroute themselves towards different roles. The position of the Ideal Self had changed a little and pointed to the areas of life in which the delinquent had experienced deep frustrations. The/

The distancing of Self from Ideal Self (Fig. 10.27) showed a greater awareness of personal inadequacies and, by implication, more dissatisfaction with Self.

At the end of the training delinquents saw themselves as socially and personally isolated. They defined themselves primarily in terms of their delinquent behaviour. Though they saw themselves isolated from the peer group, there was a wish to identify with them (Fig. 12.1). In the Borstal, Prison Officers and other inmates were seen as very similar to each other and it seemed that those two groups together constituted [the] social reality for the delinquents. Both groups were unfavourably evaluated, though, functionally they were considered better than the Self, and as more masculine and more potent than they saw themselves (Fig. 10.22). The lack of identification with others around them was possibly due to the perceived unpredictability of peers (Fig. 10.26) and the lack of sympathetic understanding by adults, resulting in distress.

The prevailing view of the relationship of the Self concept and delinquency can be summed up as follows. The adolescent with a poor Self concept may associate himself with other delinquents in order to acquire a better Self image. The association with other delinquents may provide him with an identity, a sense of belonging, a set of values, however perverse, a sense of power and mastery and a consequent improvement of the Self image. The new Self identity, in order to be durable, should compensate for the social, legal and moral repercussions of his delinquent behaviour. The positive Self image is to provide positive reinforcement, perhaps in terms of material gains or emotional satisfaction, a degree of self-confidence and a social/sensual role. The delinquent behaviour could then be a means of achieving self-realisation and self-actualisation. In short, the reinforcing effect of the new Self image should over-ride all other considerations/

considerations.

Borstal training, perhaps through punishment, control and isolation, appears to have shaken and shattered the Self image without providing an alternative. The worsening of the Self image appears to have resulted in anxiety and depression and a deep sense of personal isolation and vulnerability. These observations are consistent with the finding that negative Self concept is related to anxiety and depressive feelings (Kaplan and Pokorny 1969, Nardini 1966). The worsening of the Self image, perhaps a reversion to an earlier poor Self concept has two personal consequences for the delinquent boys, namely depression and anxiety. The former can be seen as the absence of positive reinforcement when the Self image ceases to be rewarding. The latter can be seen as a function of the dissonance caused by the distance between the Self as perceived by the individual and the Self as perceived by others. At the end of the Borstal training period, the Self concept of the group is in a melting pot and the stage is set for new learning and new associations to take place. The lowered and non-reinforcing new Self concept and the anxiety caused by dissonance can be seen as the prerequisites of changes in the attitudes of the delinquents. The acquisition of a new positively reinforcing self image which is more consonant with a non-delinquent behaviour pattern, at least in theory, is more likely to take place at this stage than at any other time. However, there is no evidence to suggest that, for the group as a whole, the acquisition of any new positive Self image has taken place.

Since the delinquent is said to have not only a poor Self concept, but also a strong identification with a delinquent sub-culture (Hall 1966, Farrell and Nelson 1978) which provide a compensatory improvement in his Self image, Borstal training appears to have been successful in taking away the glamour of delinquent behaviour and dissociating the Self from the delinquent peers. The latter were still seen as stronger and better than the Self. These findings suggest that after/

after training the group became strongly ambivalent towards the peer group. The ambivalence may be seen as a weakening of the Self identification of the delinquent with his peer group. Since the ambivalence remained unresolved, the complete dissociation of the Self from the peer group had not taken place. It seemed that the Borstal training had paved the way for the delinquent to acquire a new and more positive and acceptable Self concept. From the findings of this study, it appears that the Borstal in this study did not (and perhaps most Borstals on the whole do not) provide a stable and consistent environment which would facilitate the learning of those skills and attitudes which would help the trainee to initiate and develop new behaviours and sustain a new, positive and social acceptable and rewarding concept of the Self.

A reformation of the Self concept does not occur inside the Borstal. It may be that Self reformation can be successfully and durably achieved only when the individual is living in the outside world. However acquired, a new Self concept should be readily identifiable with a more acceptable sub-culture. Self esteem enhanced in this way is more likely to insulate the delinquent in the future against delinquent roles and a delinquent sub-culture.

One of the most interesting findings, and in contradiction to the popular belief, is the group's post-training positive attitude towards authority, discipline and even towards the Borstal training itself (Fig. 10.22). In the literature, delinquents are reported to rebel against authority figures, punishment and behaviour constraints and controls. The delinquents in this group, in fact, viewed them with favour; they were liked, respected and desired.

After the training, the authority figures that were respected and considered were the Police. (White and Porter 1970 had also reported this).

In/

In this study there was some evidence to suggest that the group wished to identify with, among others, the Police. The Self identity system showed (Fig. 12.1) that the group wished to be similar to (or identify with) the Police and the peer group. Such a secure identification would compensate for the loss of Self esteem. The wish to identify with other delinquents might provide them with a group membership, a definite identity and a dominant masculine role. However, the actual Self was distanced from these two groups. The Police, perhaps admired for their obvious attributes i.e. their power and authority and their functional importance. The peer group were admired for they were seen as stronger and more powerful than they saw themselves. The Police, it seemed, enjoyed a distant respect and the peer group evoked strong ambivalent feelings. The group did not completely alter their pattern of identification with the peers. Such a change seems unlikely to occur, perhaps due to the amount of dissonance between the Self and Others, coupled with the absence of suitable models within the Borstal. The feelings of helplessness and worthlessness of the Self appeared to have intensified the need to identify with an authority figure (e.g. the Police). which would generate confidence and restore respect. Principal Component Analysis showed (Figs. 10.23 and 10.27) that among the most important attributes of an authority figure, which made it worthy of identification were stability and predictability. The findings suggest that inconsistencies observed in an authority figure were deeply resented, leading to a total and active rejection of it. It appears that the rejection of authority, so commonly attributed to delinquents, is a reaction to the failure of authority figures to be stable, consistent and predictable. This failure on the part of an authority figure would seem to lead to expressed feelings of insecurity, anxiety, conflict, ambivalence and aggression towards the (a)uthority itself. Erratic and inconsistent methods of family discipline have been closely related/

related to delinquent behaviour (McCord et al 1959, Sears et al 1957, Glueck and Glueck 1950, West 1969). This inconsistent behaviour of others towards the child would lead to, among other things, a sense of insecurity and uncertainty. It seems that an adult who behaves consistently towards the child is admired and respected by him. For insecure individuals, predictable behaviour would seem to define a secure and structured reality. It seems plausible that an insecure delinquent would, in fact, desire and seek a consistent and predictable structure, and having found it, he would respect it. The above assertion would hold, both for individual and social situations. Along with the Police and Discipline, Borstal training also drew a favourable reaction from the group. Borstal training, which was considered as unpleasant and unpalatable, was taken as a "bitter medicine." It became considered functionally more useful (Fig. 10.21 and Fig. 10.22) and the group acknowledged that it had done them some good. Borstal training was admired, for it provided them with a consistent, stable and predictable, structured discipline (Fig. 10.23) which was highly rated as desirable. It would seem that all authority figures were judged against the three key attributes; whether they were consistent, predictable and comprehensible. Prison Officers, on the whole, were seen to have failed on these criteria. Prison Officers and the peer group were judged to be unpredictable and inconsistent and therefore dissociated from the Self. The Police were the only authority figures which the group admired. (Fig. 10.24, Fig. 10.25 and Fig. 10.26).

An important authority figure, the Father generated more ambivalent feelings. He was liked and considered important (Fig. 10.21 and Fig. 10.22). At the same time, he stood out as the most inconsistent and unpredictable and incomprehensible character (Fig. 10.23). Functionally Father was not considered more important than before and he was/

was seen to have failed to discharge adequately his role. Father remained an enigmatic and incomprehensible figure for the delinquent. He might be loved more now, but perhaps for his inconsistencies (Fig. 10.23) he had ceased to enjoy respect as an authority figure. He was distanced from the Self and actively rejected as a model for identification. (Fig. 12.1).

Another consequence of the change in the Self concept of the group was the concomitant change in the Social/Sexual role. The identification of a delinquent with a delinquent sub-culture would seem to have provided him with a Self image and a corresponding Social/Sexual role, perhaps a manly facade. Borstal experience appeared to have shattered this facade and left the delinquent feeling weak, exposed and vulnerable, without providing him with an adequate replacement. The need to have an appropriate social/sexual role was very strongly felt, hence the desire to identify with a likeable, stable authority, to join masculine peer groups and to have an empathic understanding with other people. As a result of Borstal experiences, the desire had become more acute. With the Self image emasculated, the need for having an adequate and satisfactory role was apparent. Once again, identification with suitable models, if they were available, might have fulfilled the need for the group.

Delinquents came to admire and respect simple, stable and unambiguous sets of values. Rebellious anti-authority behaviour can be viewed as the delinquent's protest against, not the authority, but the inconsistency of the authority. The Borstal appears to be seen to have fulfilled the need to have a structure and order and these constraints became much valued. However, the delinquents still saw themselves as distanced and dissociated from the people and structures around them. they wished to identify themselves with Other People, Life Outside and with/

with their peer groups, but in spite of the perceived similarity between Self and Others, there was no evidence for an emotional correspondence with them. There appeared to be a strong but frustrated need for stable interpersonal relationships, for which they lacked the opportunities and skills. Borstal experiences appeared to have offered little if any opportunity for social learning. One of the ways in which social development is said to take place is by means of identification by the child, with an adult model, and in the absence of an acceptable model, the child may subscribe to delinquent models and values (e.g. Bandura and Walters 1958). The Borstal did not provide any opportunity for what Kohlberg called "personal identification". It would appear that, in the absence of new identifications and new social learnings, the delinquents would soon revert to their previous behaviour, once they were released from the Borstal and returned to the community.

Compared to the Father, the Mother was seen to have more positive attributes. She was loved more and seen as a more delicate and feminine person and not necessarily as a source of destruction and deprivation. There appeared to emerge, a greater rapport with her than with the Father. However, she was seen by the group as vulnerable and weak as they saw themselves. The Mother did not hold the same functional importance as the Father (Fig 10.22). It may be that, up to a certain age, the role of Mother is of crucial importance (Bowlby 1958) but, as the boy grows older, the role of the Father gained more importance over that of the Mother (Andry 1960, 1962 Biller 1974).

Considered as a whole, the Family was seen to be more influenced by the failings of the Father than those of the Mother. The Family was seen to be very similar to the Father in its instability (Fig. 10.23). The Family remained essentially anomic and ineffectual (Fig. 10.24).

Another/

Another interesting feature of this study was the importance given to the role of emotional experiences by the delinquents. Maternal love and social aggressiveness were considered as the two parameters of the emotional world (Fig. 10.21) and Excitement, a highly desirable feature, was the common denominator (Fig. 10.22 and Fig. 10.24). Excitement was likeable and linked with Mother and Love on the one hand and was also seen as very similar to Aggression in terms of its intensity and power. The desire to seek out new emotional experiences became more acute and for the group the importance of Excitement became enhanced to a highly valued and deeply felt need. The need for emotional excitement might be seen as an outcome of early inconsistent emotional experiences (over protection - rejection) highlighted by Bowlby (1958), or it may be considered an intrinsic feature of a delinquent personality (Zuckerman 1971), or a reaction to boredom (Kraus 1977). The need for Excitement perhaps through further deprivation appeared to have become a stronger motivating force. However, the positive and intensive emotional experiences so much desired were not available during the Borstal training. Neither the need for stable emotional relationships like friendship and love nor [the] experiences of seeking adventure (in an acceptable way) could be satisfied within the confines of a Borstal. Three possible reasons for this can be surmised. Firstly, Borstals do not cater for the long term personal emotional needs of an individual, except in a very limited way. Secondly, the almost totally male environment of the Borstal provides at best limited opportunity for social intercourse. Thirdly, Borstals provide the delinquent with a sub-culture in which an individual is expected to work through a process of relearning while, at the same time, his self identification as a delinquent is reinforced. Under these circumstances, the need for the development of emotional relationships and the need for the dissociation of the Self from delinquency come in-to conflict/

conflict with each other. Furthermore, the learning of more acceptable and sublimated ways of seeking adventure and excitement can only have limited application in the world outside the Borstal.

Aggression, so commonly associated with delinquent behaviour, was seen by the group as the most negative aspect of their emotional world. (Fig. 10.21). Aggression was seen as an important emotion, affectively similar to Excitement (Fig. 10.24) in that it was a potent and dynamic force. It was also seen as a more labile, unpredictable and complex emotion than Excitement. Therefore, Aggression was not favoured any more. Its strength, it seemed, was feared by the group, as it might lead to over-reaction, impulsivity and even instability (Fig. 10.23). Aggression was regarded as a crude and clumsy substitute for Excitement seeking, with severe social repercussions. Aggression was also associated with masculine assertiveness by the group, as shown by its dynamic and potent features. Excitement, on the other hand, had more interpersonal values in that it was associated with desirable emotional relationships. Aggressive behaviour, so commonly associated with delinquents, can be seen not only as the result of faulty social learning and poor emotional control, but also an expression of a deficient Self image (West 1969) and uncertainty about one's own social/sexual role (Karavacus 1959). Aggressive behaviour, therefore, may not only overcome a delinquent's initial role-anxiety (Howells and Wright 1978) but also, his behaviour would be in keeping with the social and sub-cultural norms as well as the expectations of his peers.

Perhaps through the changes in the Self concept, the lack of Self esteem and self confidence and greater awareness of personal weaknesses, emotional and social inadequacies, the group actively rejected Aggression and dissociated Self from it (Fig. 12.1). It can be argued that such dissociation of the negative emotion of Aggression appeared to have two unexpected consequences. Firstly, it led to the loss/

loss of the masculine assertive/aggressive role the delinquent once took pride in, and secondly, the need for excitement became even more acute. Borstal experiences appeared to have been successful in cognitively separating these two powerful emotions, but there was no evidence that the sorting out had had the desired effect on the behaviour as well. The Self concept appeared to have been emasculated and, it would seem that, within the confines of the Borstal, the delinquent had little opportunity to learn how to seek excitement in an acceptable and constructive way. The chances remain that soon he would revert to old ways.

Another important impact of Borstal training has been the renunciation, by the group, of past delinquent behaviour as shown by the position of the Element, My Offence (Fig. 10.21 and Fig. 10.22). Borstal training apparently has been, on the whole, successful in instilling in the group a sense of futility of antisocial behaviour which they now regret. Guilty Feelings were now regarded as unfavourable, yet they were more consciously and more strongly felt. The overall effect of guilt could be said to be depressive. However, a sense of guilt is not an uncommon feature of delinquent behaviour (Bandura and Walter 1958), but guilt does not necessarily forestall antisocial conduct.

In the present study, the peer group was less favourably evaluated and the delinquent attempted to maintain a distance between the Self and the Mates (Figs. 10.26, 10.27 and 12.1). The group viewed the peers as more manly than the Self, an admirable attribute, yet there was no evidence for an emotional correspondence between the Self and the peers. Once again it seemed that the delinquent was in a state of conflict. On the one hand, he attempted to dissociate and distance himself from his delinquent peers, while on the other hand, compared with his poor self image, [the] peers were held in respect. This appeared to have led to a situation in which a delinquent can view his peers with

a quiet admiration while keeping himself aloof. It seems likely that, in the absence of suitable alternatives, in time the adolescent, once again would model himself on his delinquent peers.

Life Outside, though marked by aimlessness is preferred to the life inside. Surprisingly, Work was seen as the least important of all items used in this study. The importance of work and vocational training, stressed in the Borstal training, in fact, had little relevance for the group. Work could provide some structure and stability to the world outside and in the absence of a satisfactory and consistent occupation, the need for structure could not be satisfied. Delinquents are known to have poor work records (West 1973) and this may be one of the reasons for ^{the} high failure rate of Borstals.

The test-retest changes attributable to Borstal training were discussed in terms of change in the Self concept and linked to the institutional aspect of behaviour like structure-seeking, social/sexual role seeking and excitement-seeking behaviour. However, it would be an over-simplification to suggest that the above findings are equally applicable to all delinquents. The degree and the relative importance of these motivating factors for the delinquent behaviour may be subject to individual differences and may be reflected in differing behaviour patterns. For some adolescents, the most important factor motivating delinquent behaviour may be an insatiable thirst for excitement, and for others it may be a search for structured and secure reality or a satisfactory social role. It was thought interesting to study the effects of Borstal training on different types of delinquents and examine if there was a relationship between the delinquent personality and the motivational aspect of his behaviour with his mode of response to Borstal training. If such a relationship did exist, this would have significant implications for the treatment and training of different types of delinquent.

XIII(2) DISCUSSION OF RESULTS: THE SUB-GROUP DATA

The whole sample of 109 delinquents was sub-divided according to the primary offence types, namely: Larceny, Drugs, Aggression and Sex Offenders. Each offence group was further sub-divided according to the ability-level, as tested by a test of non-verbal intelligence into "Above Average", "Average" and "Below Average" groups. The data for each of the twelve groups was individually analysed in the same manner as used in the consensus testing. This interpretation of results was based upon the first two components only, as the first two components accounted for a large proportion of the variances. They were considered sufficiently illustrative of the differential effects of Borstal training on different "types" of delinquents. (See Chapter VIII for discussion of design.) The underlying assumption in this presentation of results was that the ultimate outcome of Borstal experiences was the function of the interaction of Borstal training with the types of offenders and the functioning levels of intelligence. The following is a discussion of results of each of the four offence groups, presented separately for each of the three intelligence bands.

Larceny Group

The "Above Average" delinquent with the Larceny Group had developed a deep sense of social isolation (Fig. 12.2) and a feeling of personal weakness and inefficacy of the Self. They seemed to regret their past delinquent behaviour, though it was clearly seen as a source of excitement. It seemed that they had come to see their earlier behaviour as unsatisfactory and, perhaps as a consequence of the change they now preferred a less assertive Self concept (Fig. 11.1). They came to see themselves as more distanced and different from their Mates. They had begun to view Prison Officers as more manly and powerful. With their Self esteem lowered and past behaviour renounced, there appeared to be/

be a vacuum as to what should replace their excitement-seeking needs. They might be concerned with the acquisition of a new role. However, this desire for improvement, perhaps due to a lack of social skills is deeply frustrated. As a result of an inability to find a satisfactory role, they could only view themselves as what they are not, or what they would not like to be (Fig. 12.2). In contrast to the findings in the total sample, this sub-group did not see Aggression as essentially bad, but rather as a sign of masculinity. Their resentment of behavioural constraints such as Borstal training, showed that the need for structure was not important for this group. For this sub-group, the need for new interpersonal and social skills is seen as more important.

The "Average" members of this sub-group, in spite of some deterioration of the Self image, showed no wish to improve. Their improved evaluation of their delinquent behaviour and their close association with Excitement and Ideal Self (Fig. 11.2) showed they wished to continue with their delinquent behaviour as before. The sole motivating force for this sub-group, it would seem is excitement-seeking at all costs, and delinquent behaviour is a way of achieving this goal. They seemed to take pride in their delinquent behaviour which they also considered justifiable. Their delinquent behaviour was judged to be rewarding in terms of structure and social role. This group seemed to have benefited from Borstal training very little. Delinquent behaviour remained, for them, a way to achieve what they wanted, namely, excitement and adventure. Though they valued Discipline, they resented authority, particularly the Prison Officers, possibly because they were not seen as strong enough or hard enough. It would seem that at the end of the training, this sub-group hardened in delinquent attitudes, more so than they affirmed at the beginning, in that they felt more closely associated with/

with the delinquent sub-culture. They had taken Borstal training in their stride and this had confirmed and reinforced a sense of manliness about their previous delinquent attitudes and behaviour.

The "Below Average" sub-group, in contrast, appeared to have benefited from Borstal training. This is shown by their improved Ideal Self (Fig. 11.3). Their dissociation of delinquent behaviour from Excitement is a positive sign. At the end of the training the former was evaluated as unfavourable and the latter as favourable. They expressed a degree of remorse about their past delinquent behaviour. It would seem that this sub-group was prepared to abandon its delinquent (excitement-seeking) behaviour, for it became seen as leading to trouble. The sub-group came to admire Discipline as personal and sympathetic guidance, which would eventually provide emotional security. They seemed to need, and to expect that once they were provided with a stable structure they would have an opportunity to form a secure and dependable relationship with adults. However, they continued to feel emotionally insecure. They expressed a strong wish to like and be liked, but the strict and rigid authority figures were seen as providing structure, but not the close emotional relationships that the "Below Average" Larceny delinquents wished for.

Drug Group

Various studies have established that, by and large, serious drug addicts tend to be of "Above Average" intelligence and higher than a comparison group of alcoholics, neurotics or delinquents (Mott 1972, Mott and Taylor 1974, Halstead and Neal 1968, Silver 1977, Crocket 1971). One would expect the findings on the "Above Average" drug addict in this study to confirm the findings of other studies on drug addicts. The "Above Average" delinquent in the drug addict group seemed to be somewhat self-assured and self-satisfied (also reported by Silver 1977).

Their/

Their self-congruence (Fig. 12.5) and their distancing of Self from their Offence show that they did not see themselves in terms of their past behaviour. They attached greater importance to easily understandable emotional and bodily experiences like Sex and Excitement, while avoiding abstract, complex and subtle feelings in emotions like Love and interpersonal relationships. This tendency could be a result of social and emotional immaturity (Silver 1977). Their social/sexual role reversals were similar to Kaldegg's (1973) findings. The group rated Father relatively more favourably than Mother. It seemed that they could understand their relationship with the Father better than they could with the Mother. However, the precise significance of this finding, in view of the contradictory evidence in the literature, is not clear (Kaldegg 1975, Cockett 1971). It is possible that differences in the types of

drug addicts may account for this discrepancy. The "Above Average" drug addicts in this group were personally and socially alienated and tended to attach great importance to Excitement and have a strong affinity for the drug sub-culture (Fig 11.4) but without close emotional involvement. Their continued pre-occupation with excitement-seeking and a strong identification with their sub-culture showed that Borstal training had not been a particularly beneficial experience for them,

The "Average" drug addicts saw themselves essentially as 'delinquent'. They showed a degree of remorse by a less favourable rating of their Offence and a greater awareness of their sense of guilt (Fig. 11.5) and a worsened Self image. Aggression continued to be seen by this group as the only mode of masculine assertiveness and however much they disliked this, the alternative mode of behaviour was not available to them. They had difficulty with acquiring a social/sexual role. This was further compounded by their perception of their parents as having/

having reversed their sexual roles. Mother is seen as more masculine, dominant and stronger than the Father (Fig. 11.5). In order to adopt a masculine stance they would have to identify with the Mother and this would not be acceptable since they liked their Father more than their Mother. They saw themselves as negatively as they did the Police and the Prison Officers. The group saw Excitement as a pleasant and strong emotion, yet judged only in terms of a weakness (Fig. 12.6). The group resented authority in general. The group tended to appreciate Discipline and the masculine attributes of Borstal training. It appeared that this group remained unhelped in their acquisition of new social growth.

The "Below Average" drug addicts viewed their Self and Ideal Self more unfavourably than before. They viewed themselves, and they wished to be seen essentially in terms of their delinquent behaviour (Fig. 11.6). They appeared to have primarily regressed and become passively dependent. They saw themselves as having become more like Father and wished to be more like Mother (Fig. 12.7). They also came to admire authority figures they could lean on. They judged Borstal training unfavourably, yet they thought it had provided structure and a sense of masculinity. Their ambivalence to Borstal training was perhaps due to their preference for personal relationships with Other People and Mates over the orderliness of the regime. They found Prison Officers somewhat benevolent figures with whom they could form a passive dependent relationship. They lacked the necessary social skills with which to manage interpersonal relationships with status figures as equals.

Aggressive Group

Although aggressive behaviour is almost universally associated with delinquents, the individuals in this group were characteristically (according to Kolvin's et al 1967 classification) "assertive hostiles", as opposed to "non-assertive hostiles", who would be more likely to commit Larceny offences. The "Above Average" Aggressive individuals, while having a poor Self concept, did not regard their delinquent (Aggressive) behaviour/

behaviour as bad, or as a reason for any remorse. They saw their Aggressive behaviour as an effective way of seeking Excitement, a potential source of stimulation and an unmistakable way of asserting a masculine role (Fig. 11.7 and Fig. 12.8). They respected all those who were hard, aggressive and assertive (e.g. Father). This group went on believing that Aggression was the most effective mode of behaviour. Borstal did not succeed in altering the attitude towards Aggression. They considered their delinquent behaviour entirely justifiable. It had the important function of providing adventure, as well as a masculine social/sexual role. Prison Officers were admired only because they were stronger, harder and more masculine than they saw themselves. This sub-group tended to respect only Aggression and all other modes of responding were looked down on. A sense of guilt was seen as a sign of weakness. They remained socially inept and personally isolated. Excitement remained the prime motivation for action. They found the Father lacking in the necessary authority and control.

The "Average" Aggressive sub-group, at the end of the training, had a favourable Self concept and an improved Ideal Self (Fig. 11.8). The sub-group was self congruent and appeared to have benefited from Borstal training. They came to look unfavourably on Aggression and rejected their past delinquent behaviour. They seemed to have become more aware of a sense of guilt and remorse. They also dissociated themselves from the delinquent sub-culture, although Excitement and Aggression were linked (Fig. 12.9). Excitement was closer to the positive end of their emotional world and to sexual arousal and sexual role. Borstal training appeared to have provided them with a structure which they admired. They came to respect authority and the dominant masculine role. Prison Officers were not seen as strong enough to be admired. The Police, on the other hand, like the Father were respected for their manly attributes. The unpredictable behaviour of Other People would appear to make them socially anxious and uncertain.

The/

The "Below Average" sub-group favoured and respected structure. They also admired authority. At the end of the training they saw themselves as impulsive and uncontrollable, thus they disvalued Excitement, Life Outside, Ideal Self and even Love (Fig. 11.9). It may be that, at this point, they were at a loss as to what they should do about feelings which they did not seem to understand fully. For this sub-group, Borstal training appeared to have satisfied a need for stability and a structured world. They saw their offence as a mode of self assertion. Aggression, on the whole, did not appear to be an important element and they seemed to be preoccupied with their emotional and social insecurities. They remained unsure of their social/sexual role which, for this sub-group was closely linked to the inadequacy of the Family.

Sex Offenders

The "Above Average" Sex Offencer presented a complex picture. His emotional and social life was masked by ambivalence, splitting and conflict. By the end of the training the dominance of the Mother over the Family was rated as emasculating. The Father remained insignificant and the Mother continued to be seen as playing the dual role of both Father and Mother (Fig. 11.10). Ambivalence towards Mother and conflict in the Self image was noted. Social and emotional aspects of life were seen as inextricably linked with one another. Love, Sex, Excitement were seen as the masculine attributes of the Self, yet they were considered as unworthy and undesirable. The low Self image was marked by a sense of personal and social isolation and they could see themselves only in terms of gaining Excitement in the Life Outside (Fig. 11.10). Therefore, nor surprisingly, they regarded their Offence somewhat favourably. Self and Ideal Self are rather incongruous (Fig. 12.10) for whereas the former was marked by femininity, the latter was seen as masculine (Fig. 11.10). It may be that a sexual offence provided Excitement/

Excitement and an opportunity for asserting a truly masculine role. As long as the Mother's influence continued to prevail, they would have to prove their masculinity repeatedly in the Outside World. This sub-group favoured Borstal Training, which could be seen as providing a refreshing alternative to family discipline, and perhaps a sense of manliness. The Police were respected for their masculinity while Prison Officers were judged less masculine than they wished themselves to be.

The "Average" Sex offenders seemed to be quite content to be classed as 'bad boys'. In spite of a poor evaluation of the Self and the Ideal Self, they expressed a marked degree of self satisfaction (Fig. 12.2). They saw their delinquent behaviour as providing a masculine, assertive role and recognition, and considered their behaviour and their resentment of the Law, as justifiable. Their evaluation of Borstal training indicated that the Borstal had provided recognised status as a confirmed delinquent, an image they seemed to cherish. They seemed to be preoccupied with their masculinity. Prison Officers and Father were judged as ineffectual: they did not wish to identify with Father. However, a wish to identify with peers, seen as highly masculine and aggressive, was strong. Sex was dissociated from delinquent behaviour and considered unimportant.

The "Below Average" Sex offender rated himself closer to a weak and feminine Mother. He felt personally and socially isolated (Fig. 12.13). A wish to identify with Father was frustrated, for he was seen as ineffectual. His sense of isolation and low Self esteem enhanced the importance of authority figures. The group, as a whole, respected Prison Officers and the Police. Since their Self image remained somewhat effeminate, they appeared to be of a passive, dependent nature. The active identification remained as a wish. They came to see Borstal training as too masculine and too dissonant to be linked with their Self image/

image. They continued to see their sex offences as a means of achieving Excitement, while they remained socially anxious (similar results were described by Howells and Wright 1978).

A discussion of the impact of Borstal training on different sub-groups was presented. These differences were assumed to relate to the respective personality characteristics of the sub-group members as reflected by their past delinquent behaviour and the Borstal experiences. Ideally, in order to study the interaction between the Borstal and the trainees, the individual trainee, rather than a small group should be the subject of the study. However, the analysis of individual cases would be outside the scope of this study and an analysis of the sub-groups was considered sufficient to investigate the differential impact of Borstal training.

In the next section, an overall evaluation of results is presented, particularly an assessment of the extent to which, in this case, Borstal can be said to have succeeded or failed to achieve its stated aims and objectives.

XII (3) EVALUATION OF RESULTS AND THE AIMS OF BORSTAL TRAINING

The aims of Borstal training as outlined in the Borstal Rules are, correcting the antisocial and delinquent behaviour of the offender and instilling into him a "proper sense of personal responsibility". The custodial staff are expected to maintain a firm "order and discipline" within the institution; also, they are expected to "influence the inmates through their own example and leadership and enlist their willing co-operation". By the end of the training, the offender is supposed to be prepared and trained to "lead a good and useful life". The ultimate goal of Borstal training is seen as the modification of the delinquents' behaviour into one more consistent with social norms.

The results of the present study show that Borstal training does have a profound effect on most of the trainees. However the direction/

direction of change achieved is not always as anticipated in the aims of Borstal training. Unexpected changes do occur. One of the reasons for unexpected changes, it may be argued, is the naive, incomplete and vague formulations of the stated aims themselves, by and large reminiscent of military discipline. Among the most salient changes which seem to have taken place in the attitudes of delinquents in this group, is a far greater emphasis on the functional importance of people and situations. The attitude of the group towards Borstal training changed markedly in that it came to be considered as useful and necessary, while, at the same time, seen as a mode of punishment and deeply resented. The Borstal training was acknowledged as a 'bitter medicine'. A similar shift was apparent in the delinquents' attitude towards authority and discipline. It would seem that Borstal training had been quite successful in instilling the awareness of the value of order, discipline and an organised life. A high proportion of delinquents in the sample acknowledged the utility and the need for discipline and they tended to prefer it to their previous undisciplined and haphazard way of life. They liked discipline for it provided them with consistency and stability.

The group, as a whole, came to judge authority figures as worthy of respect, with the Police being most respected and feared, though still accepted as useful and important. There was a strong wish on the part of the delinquents to identify with authority figures. Authority figures, no matter how bad, had to be consistent, strong, powerful and dominating before they were seen to deserve respect. Prison Officers, on the whole, were seen to have failed to provoke respect for themselves as authority figures. They were seen as weak, ineffectual and inconsistent by the group. Prison Officers are expected to serve as models of behaviour for the delinquents to learn from and through their personal influence and interaction/

interaction they are expected to facilitate the development of the delinquent. The results suggest that they have not been able to fulfil this function. They are seen as unimportant, lacking in empathy and understanding, not worthy of imitation and the relationships they proffer are not conducive to the development of social learning. Apparently this failure of the most important means through which Borstals seek their aims, is due to the fact that Prison Officers are assigned a role which can be seen as contradictory. In the Borstal Rules, on the one hand, they are expected to be strict disciplinarians, symbols of authority and, if necessary, able to mete out rewards and punishments; on the other hand, they are expected to form a therapeutic relationship by sympathy and understanding, and so facilitate the development of the delinquent, both personally and socially. This basic contradiction and inconsistency in the role of Prison Officers was perceived by the delinquents and resulted in an increasingly negative attitude towards them. The lack of satisfactory relationship between staff and trainees seemed to have precluded the development of new skills in making relationships.

The overall effect of Borstal experience was the markedly lowered Self image of the trainees. Some developed a sense of guilt and remorse about the past behaviour, where a brittle and superficial facade had been quite successfully shattered. They came to feel weak and vulnerable. This state may be considered a precondition for a change of attitude and behaviour, leading to the learning of a new set of skills and roles in order to dissociate themselves from their previous delinquency. This apparently did not happen. The delinquents still saw themselves in terms of their delinquency. Trainees, on the whole, were depressed and came to feel let down by mates and the staff. Trainees became aware of their shortcomings and weaknesses; they came to wish to enjoy life and to be able to communicate and relate to people and to have a purpose in life.

Borstal/

Borstal training was successful in changing attitudes towards aggression which was generally considered as bad and futile. Aggression seemed to have an important function for the trainees. In addition to being a destructive force, it was also a mode of self assertion, a means of achieving adventure and a symbol of manliness. By disowning Aggression for its destructiveness, its other functions must also be disowned, consequently leaving the trainees without any clearly defined social and sexual roles. There is little evidence to suggest that satisfactory social learning took place during the training. The group, as a whole, was left feeling uncertain about Other People in general and Life Outside. The work and vocational aspects of life which are rated so vital in the planning of Borstal training were not apparent in the practice.

The results of sub-group analyses show marked group differences in the responses of different delinquents to similar Borstal training. The "Below Average" ability delinquents appeared to have benefited from the structural and physical aspects of the Borstal. They were, by and large, the most inadequate and insecure of the whole group. They tended to find in the Borstal a stable reality which they admired and appreciated. They sought a close interpersonal relationship with a father figure who would provide them with a sense of self identity and a sense of achievement. The Prison Officers were entrusted with the role of providing such a figure to facilitate development. For the "Below Average" group of delinquents it seemed that the Prison Officers had fulfilled their role with considerable success. At the end of the training the "Below Average" group, in general, did feel itself to have a sense of achievement and a somewhat more acceptable self identity. These trainees respected authority if it was simple, consistent and understandable, and if it was sympathetic and dependable. Although the "Below Average" group showed small change in their attitudes, such changes as they did show were consistent with the aims of Borstal training. Among the Larceny group, the trainees had/

had a better Self and Ideal Self at the end of the training than they had before they began the training. These results are generally in line with Hasleton's (1972) findings.

Among the "Above Average" groups, all except the drug addicts showed a marked change in attitude. Those groups showed a great deal of self awareness and they seemed to have become more conscious of their weaknesses and shortcomings. Their attitudes towards their past behaviour appeared to have changed in line with the aims of Borstal training. They did not develop alternative modes of behaviour, resulting in a greater sense of vulnerability. By and large, they grew to respect authority figures like Prison Officers and considered them worthy of admiration. The search for adventure and excitement was a more important feature for the "Above Average" delinquents than a search for a structured and ordered life. Their concept of masculine identity was closely linked up with their delinquent behaviour and they could not give up their delinquent behaviour and so lose this masculinity. Borstal training did not help them to resolve this dilemma. The "Above Average" drug addict saw Borstal training, perhaps justifiably, as totally inappropriate to himself. Drug addiction seemed to serve three important functions in that it provided a sense of adventure, it protected from social and interpersonal anxieties and it helped identification with a well defined sub-culture.

By contrast, the "Average" ability addict saw his behaviour as essentially delinquent and Borstal training as not inappropriate. The "Average" ability sex offenders changed for the worse. Their attitudes shifted in the direction opposite to the expected one. The "Average" ability sex offenders, on the whole, seemed proud of their anti-social behaviour. Their delinquent acts continued to provide a sense of self identity, recognition and even pride. Similarly, the "Above Average" Aggressive/

Aggressive delinquents continued to see their behaviour as justifiable, providing a masculine identity and some degree of adventure. On the whole, the Aggressive delinquents respected Aggression in others and were intolerant of weaknesses. The "Average" ability Larceny group was among those who were still considering their delinquent behaviour as justifiable and rewarding. They saw themselves as likely to continue to behave anti-socially. They appeared to establish a close affinity with the delinquent sub-culture, perhaps much stronger than before.

The main findings of this study were discussed in view of the aims of Borstal training. The Borstal in this study was shown to have succeeded in achieving its aims in some ways, but failed in others. For some trainees, Borstal training was seen to be wholly or partly beneficial, but for others it was not. There were still others who responded to the training in an unexpected way and, in some cases, one can speculate that Borstal experience, in fact, has had the opposite effect to what was intended. The diversity of the impact of Borstal on its trainees makes it difficult to assess the overall efficacy of Borstal training as such. The very question of assessing the efficacy of Borstal is riddled with methodological problems. The limitations and drawbacks of various methods of assessing institutional effectiveness have already been discussed in Chapter I (Section 4). In the following section the salient issues regarding the assessment of institutional effectiveness will be reiterated, with particular reference to the findings of the present study.

XIII (4) EFFICACY OF BORSTAL TRAINING AND METHODS OF ASSESSMENT

The efficacy of Borstals in achieving the stated aims is yet to be fully established. In spite of a greater emphasis on rehabilitation and retraining of juvenile delinquents, the known record of success rate of Borstals remains somewhat disappointing. Follow up studies show that, following discharge from a corrective institution, the rate of recidivism is/

is around 70% (e.g. Cockett 1967, 60% Hasleton 1972, averaging around 70% Cornish and Clarke 1975). In a more recent report * the rate of reconviction within two years of discharge from a Borstal was as high as 85%.

Admittedly, the follow up approach has limited validity as a method of assessing a Borstal's effectiveness. The rate of reconviction is subject to various extraneous factors like discretionary judgment of the judicial authorities, the vigilance of the police and the attitude of a court to the previous record of the offender and the prevailing penal policy of the time. Therefore, taking frequency of conviction as the sole evidence of criminal behaviour is an over-simplified view of recidivism. However, it is reasonable to assume that, in follow up studies, reconviction rates are likely to be under-estimated more often than over-estimated. It is reasonable to conclude that the rate of recidivism is around 70% and that Borstals, on the whole, are not very effective in checking delinquency. The above findings of the follow up studies cannot be summarily dismissed, in spite of their shortcomings of the methods used. But, follow up studies usually treat recidivism as an "all or none" affair, disregarding the various grades of seriousness of delinquent behaviour and they do not elucidate the variables which influence the eventual outcome of a training programme. Without the empirical relationship between certain variables and the behaviour they produce, the effectiveness of a training programme cannot be improved. The 'self report' method (West 1977) has its own obvious shortcomings.

Inside a Borstal, the effect of the training on the inmate is assessed by observing his overt behaviour. The inmate who co-operates in the training programme, takes an active interest in the daily routine, gets on well with other inmates and the staff, shows due respect and reverence/

*N.A.J.C. (1980) Paper No. 3.

reverence for the rules is generally considered to have responded well to the training. An inmate who shows 'good' behaviour earns privileges inside the Borstal and he may be given an earlier discharge from the institution. However, the overt behaviour of the inmate may reflect only the degree of conformity he shows in order to gain these positive rewards. Once discharged from the institution he may not have to continue to behave in this way. While those who behave badly inside are likely to behave badly outside, those who behave well inside do not necessarily behave well outside, after release. Life inside an institution may not bear more than a superficial similarity to the outside life, and acceptable behaviour inside is not the same outside. The institution life inside is usually organised and protected, and since the trainee does not have to bear the same stresses of life as he does outside, and he does not have the same choices in an institution, he is less likely to behave in a delinquent way during the period of training. For the same reasons, even if a delinquent learns a completely new set of behaviours, they are not always generalised and maintained in the life outside.

Another approach to the evaluation of the impact of Borstal training is to study cognitive and attitudinal changes. By monitoring these changes, one can ascertain the extent to which the institutional training has been successful in altering anti-social and delinquent attitudes, and the extent to which these attitudes are brought sufficiently into line with the non delinquent ones. A cognitive approach is primarily concerned with changing attitudes and looks to changes in behaviour as a consequence of attitudinal changes. From a change of attitude, a change in behaviour may be inferred. The validity of such methods in determining the success of an institution in transforming a delinquent into a non delinquent, is highly suspect, for the correspondence between attitudes and behaviour cannot always be established/

established (Jaspars 1978, p. 274)...

The cognitive approach relies heavily on the subject's own evaluation. Still, this approach can be considered as valid and reliable. The effects of conformity and acquiescence can be minimised if the techniques used are sufficiently subtle. As has been shown in this study, the impact of Borstal training on the attitudes and perceptions of trainees can be assessed with a reasonable degree of accuracy*. By observing the magnitude and direction of changes in the attitudinal ratings, the 'psychological' influence of a Borstal training programme can be ascertained. The question of efficacy is a different matter. Whether these changes are beneficial to the trainees or not is subject to many different factors, of which the cognitive factor is just one. Whether these changes immunise a delinquent for a long time after he leaves, or not, would be the subject of a further study. It is, in any case, simplistic to assume that a successful change of attitude is sufficient to immunise an offender from any further delinquent behaviour. If a delinquent, after he has been released, returns to his original pathological environment, the cognitive changes brought about by institutional training are likely to be nullified. Buikhuisen and Hoekstra (1974) in the results of their final study, report that subjects returned to their original environment after release had a high rate of recidivism, and those who moved away from their unstable environment had a lower rate.

Implicit/

* In the absence of a strictly comparable control group, which in this type of study is almost unobtainable, it is difficult to say what effect Borstal training had on the attitudes of this group. Of course, maturation does play an important role in producing change, over time. It is up to each individual study of this type to determine the validity of its findings. This point is more fully discussed in Chapter VIII.

Implicit in the system of Borstal allocation is the belief that the efficacy of Borstal training can be enhanced by matching the type of delinquent with the appropriate type of Borstal. But since the empirical evidence to suggest who would benefit most from what type of training is lacking, the present Borstal allocation procedure is little better than a shot in the dark. It is a truism to say that the eventual outcome of corrective training is a function of the interaction between the treatment and the treated. However, there have been few attempts to study this relationship. For a considerable time the influence of the Mannheim-Wilkins Scale (1955) dominated the thinking of workers in the field. The scale predicts recidivism without any reference to the inmates' response to training and only on the basis of historical data, the inference being that the rise of future criminality is unaffected by rehabilitation processes. Recently, various studies have looked into, for example, the efficacy of different institutional policies for different types of delinquents. Maskin (1976) found that work orientated groups have a high rate of recidivism, while family interaction and communication is highly successful in the treatment of delinquent behaviour. Hasleton (1972) comparing the rate of recidivism in four different types of institutions, found that simple-organised institutions with emphasis on country style living helped even the dull delinquent, while the strict military style regime also reduced recidivism. Emotional and ambivalent approaches made little impact. Kraus (1974) compared delinquents on probation and detention, in a five year follow up. He found that the two modes of dealing with delinquents affected them differently and that the recidivism rate was higher after detention than after probation. Certain offences (such as 'taking and driving away' and 'breaking and entering') were more likely to occur after detention by both first offenders and recidivists. Recidivists were more likely to commit hooliganism after detention.

It/

It is quite evident that sex offenders have a different attitude towards sex than non sex offenders (Howell and Wright 1978). Aggressive delinquents have different emotional attitudes than non aggressives (Bandura and Walters 1958; Henderson et al 1977). The attitudes of drug addicts are different from non drug addicts (Kaldegg 1973 and 1975). Therefore, in order to study the impact of institutional training, the study of differential effect is critical, yet in the studies on Borstals, this important failure of rehabilitation and retraining of delinquents has been sadly lacking.

The findings of the present study appear to show that Borstal training affects the cognitive structure of different types of delinquents differently. All together the classification used in this study cannot be considered more than as suggesting hypotheses to be further explored and tested. The findings strongly suggest that a Borstal training programme should take into account the type and ability level of the delinquent it has, so that the programme can be tailored according to his needs.

The limitations of the design and methodology of this study have been discussed at length in Chapter VIII. It is acknowledged that the above findings cannot be generalised to other groups and other Borstals without extreme reservation, not least because the subjects and this institution were highly selected and unique. The absence of control groups, the artificial criteria for classification, the lack of precise knowledge as to the training schedules and limited scope in the selection of constructs and elements among others, have all affected the external validity of the findings. However, by demonstrating a differential effect of Borstal training, a case against the use of blanket terms like "Borstal training" its 'efficacy' with 'delinquent' has been put forward.

XIII (5) STATUS OF BORSTAL TRAINING - SOME SUGGESTIONS FOR IMPROVEMENTS

According to the Borstal Rules, the broad aims of Borstal training/

training are to effect desirable changes within the anti-social individual. Sometimes behavioural changes are considered consequent upon cognitive changes (Cochrane 1974) and sometimes attempts are made to change behaviour by providing opportunities for interpersonal relationships, individual group therapies and behaviour modification (William 1978). There is little doubt that institutions can and do change behaviours and attitudes. However, a valid monitoring and the appraisal of these changes depend on the sensitivity and the precision of the method employed to study them. The studies which show that different methods of training produce similar results (e.g. Cornish and Clarke 1975, McMichael 1974, Craft 1975) may need to examine closely their methods of assessment. The problem, however, is that the changes accrued are not always consistent with the aims and expectations of Borstal training. The high rate of recidivism shows that those delinquents who are judged to have responded well to the training and have appeared to have changed in the expected direction and are discharged early, commonly do not generalise their 'new' behaviour to the world outside the institution. The failure of Borstal training in these important respects needs to be looked into. With a steady increase in crime over the last ten years, there has been a corresponding increase in delinquents committed to Borstal training (818 in 1969 to 2152 in 1978). The rate of reconviction, if anything, appears to be on the increase. These statistics may be alarming, but they are hardly surprising. Although various studies have shown that the traditional blanket approach to the treatment of delinquency is not very effective (e.g. Nardini 1966), that the adverse post-institutional environment is an important factor in subsequent delinquency (e.g. Reckless and Sindwani 1974) and the effectiveness of the differential treatment of delinquents has been advocated (e.g. McKegney 1967) yet this overall approach of Borstals to the training of delinquents remains more or less unchanged (on Feltham Borstal/

Borstal, see William 1978). The system of selection and allocation has remained the same since the Second World War. Little, if any, attention is paid to individual differences among delinquents and their responses to institutional training programmes. The concept of generalisation of institutional behaviour to the world outside continues to be taken for granted and remains the basic tenet of the philosophy of Borstal training. The whole notion of Borstals needs to be closely re-examined and updated. The following is an attempt to appraise critically the present day theory and practice of Borstal training with emphasis on some of the specific issues involved. Later on, some suggestions to overcome the present drawbacks will also be made.

For a start, the aims and objectives of Borstal training may be seen to be stated in qualitative, judgmental, vague and over-generalised phrases which are idealistic, and to some extent, self contradictory. They sound like reminiscences of the Victorian era, with little respect to individual differences. Moreover, there is no acknowledgement of environmental and situational variables that may have an equally salient effect in producing antisocial behaviour as the personality factors. As to how to achieve the aims of Borstal training, the Rules offer little help and guidance. The main bulk of the responsibility of achieving the stated aims falls on the Prison Officer. He is entrusted with a sacred duty, but his role is essentially dual; that of a firm disciplinarian who is directive and, presumably, of a therapeutic catalyst who is understanding and permissive enough to facilitate growth development. This striking contradiction, also perceived by the trainees, would make it difficult for the officers to discharge their roles adequately. An officer may be seen by some to be a disciplinarian, or a benevolent figure, usually neither, and very rarely both. Perhaps Borstal training should state its objectives more precisely and provide more consistent guidelines for different/

different staff of the institutions. The aims of Borstals need to be redefined in the light of present day knowledge and Borstals given more realistic objectives to achieve. Borstals are too ambitious in aiming at an all round reformation of delinquents. It may be more appropriate for a Borstal only to prepare delinquents for further training, which can take place outside.

There is another contradiction in the organisation of Borstals, with a wider implication. The contradiction is between the professed philosophy of humane treatment of criminality generally agreed by the experts, and the erratic social policy which periodically gets infused with dogmatic, harsh and primitive attitudes. During the late 1960's the practical guideline for institutions was to ensure security, discipline and rehabilitation, in that order. More recently, the practice of "short, sharp shocks" for the young offenders is being seriously considered to be incorporated into the present penal code. These changes in the social policy appear to be reactions to the persistent failure of the methods of remedying and preventing delinquency. Instead, the causes of this failure should be looked into and if possible, rectified. The fault may lie in the method of intervention and in the underlying assumptions. In order to improve the generalisation of behaviour, the internal institutional environment should be more carefully organised and the importance and relevance of the behaviour to be changed and the situations that may lead to such behaviour should be ascertained.

The present model of training of delinquents is based on a medical model. It assumes that a faulty behaviour lies within an individual and in order to cure this, he is temporarily removed from an unsuitable environment, for treatment and subsequent immunisation. Hence the introduction of an allocation procedure which badly needs to be updated. The [admixture of legal labelling and psychiatric diagnosis is but/

but an accurate description of a delinquent's personality and the nature of his criminal behaviour. Perhaps a functional analysis of problem behaviour needs to be carried out in which the behavioural as well as environmental factors in which this behaviour is prompted, elicited and reinforced, should be identified, and the inappropriate stimuli which control such behaviour should be isolated. The purpose of allocation procedure might be better served by an objective analysis and assessment of behaviour so that an appropriate training programme could be worked out and the effect of training on identifiable behaviour could be ascertained.

The environmental learning approach (Cornish and Clarke 1975) calls for a detailed analysis of behaviour patterns of the individual and a tailor made intervention strategy to suit the individual needs in a systematic way. Since the individual differences and environmental conditions can interact to produce this behaviour, both personal and situational behaviours should be taken into account in the model of intervention. Therefore, the training of delinquents in isolated institutions is misplaced. Delinquent behaviour will be resurrected when the offender leaves the institution. They assert that the more therapeutic the institution, the less likely it is for behaviour to be generalised to the outside world.

The institution should attempt to simulate the life outside and should treat the post-release period as the gradual transition of the training programme from the inside to the outside world. A training programme should not terminate at the time of discharge of a trainee from the Borstal. It can be argued that more effective training will take place after the delinquent has left the artificial and protected life of the institution and he is face to face with the real world. Furthermore, the institution/

institution should ensure that their trainees are not released into a pathogenic environment and that they are provided with alternative forms of behaviour (e.g. through social skills training) and alternative forms of reinforcement (e.g. through vocational skills).

The importance of a tailor made training programme cannot be over-emphasised. To apply the same methods and have the same targets for all inmates of a Borstal, however selective it may be, is far from meeting the requirements of an individual functional analysis and an effective training programme. Punishment alone may suppress behaviour in some cases and suppression may also restrict the need to learn alternative ways to gain social reinforcement. Delinquent behaviour may occur under covert stimulus conditions which are not identified without a careful functional analysis of behaviour.

The inmate's behaviour in the institution may be governed by conformity and compliance. The teaching of behaviours incompatible to delinquency, like essential life skills, vocational training, social skills, job skills and so on, is not going to be very effective unless the social reinforcement value of learning such behaviour is also provided outside the context of the institution. Even if a target behaviour is said to be identified and modified, the delinquent's subsequent behaviour may fail to demonstrate that the modification has led to a decrease in delinquency. It is essential to demonstrate the all important relationship between the target behaviour and the consequent reduction in delinquency. Specifically, the acquisition of appropriate skills would reduce the chances of an adolescent continuing to behave in an antisocial manner. A careful behavioural analysis and individualised training programme can improve our understanding as Baer et al (1968) put it:

"An applied behavioural analysis will make obvious the importance of the behaviour changed, its quantitative characteristics, the experimental manipulations which analyse with clarity what was responsible for the change/

change, the effectiveness of these procedures in making sufficient change for value and the generality of that change." (p. 97)

The generality of a behaviour from one situation to another depends on similarity and proximity between the situations.

Tunnel (1977) calls this "naturalness", which has three dimensions: of the setting in which the individual is exposed, of the behaviour which is uncontrolled in any way while it is being studied and, of the treatment which is a natural discrete event that would have occurred in any case. He further states that the failure of generalisation of the results of an institutionalised programme to real life situations is a consequence of ignoring the dimensions of "naturalness".

The extent to which a certain type of offender in an institution identifies with either the staff or the inmates may be a function of that particular setting and it cannot necessarily be generalised beyond that institution. This uniqueness of situational factors has often been ignored in the study of the efficacy of Borstals. The situational factors are the result of the person-situation interaction which may be more important than the effect of the person or the situation. Magmussen and Ekehammer (1975) thought the results of studies of institutions cannot be generalised to other situations outside the institution. Therefore, a retraining programme, in order to be more effective, should take place outside the confines of an institution.

There will always be some individuals who will benefit from institutionalised training along the traditional lines. Perhaps the dull, the naive and insecure do need a simple structured and ordered living, but for most of the delinquents, institutional training should not be considered as the end, but as the means to an end. In its present form, Borstal training, as has been pointed out, paves the way for possible learning of new behaviour. The changes in the Self image of the different groups/

groups within the sample open up a series of alternatives for the inmates, once they are returned to everyday community life. The majority of delinquents have been influenced into changing their attitudes towards their previous delinquent behaviour, yet Borstal training seems not to provide the alternative skills to replace the previous behaviour. It may fall outside the domain of Borstals, but any training programme should follow up with a specialised training in necessary skills, and provide a behaviour modification therapy and social skills training to enable them to cope with the life outside. Such skills should be provided as much as possible within the community setting. Borstal training programmes should ensure that a delinquent does not only not return to a pathological environment after release but also, in selected cases, family therapy should complement the individual training programme, while in other cases, surrogate families should be made available if necessary. Therefore, allowing, as far as possible, the growth and development of the juvenile to occur in as natural an environment as possible, close supervision can help the newly learned behaviour not only to generalise, but to be maintained over a number of different situations.

A training programme carried out outside an institution would provide the individual with an opportunity to acquire a more positive Self-identity, maintained by a sense of belonging to a (non delinquent) sub-culture. It would provide an opportunity to acquire and reinforce a clearly defined psycho-sexual-social non delinquent role, and an opportunity to seek adventure and excitement in non delinquent activities. Then perhaps, the stated aims of Borstals might begin to be achieved in a more permanent sense.

APPENDICES

LIST OF APPENDICES

- A. Identification and Background Data Collection Form.
- B. The Semantic Differential Format and the list of Concepts in the order of Presentation.
- C. Factor-analysis of the Semantic Differential Data.
Factor Loadings with Varimax Rotation, carried out on Individual Concepts and the whole Data put together.
- D. Repertory Grid Analysis: The sub-group Data for each intelligence level in each Offence Group separately presenting:
 - (a) The overall direction and the amount of change observed in each individual element and the Principal Components with latent roots and the proportion of Variance accounted for.
 - (b) Element and Construct Loadings on the three Principal Components.
 - (c) Elements dispersion according to their loadings on each of the three Principal Components and the relevant Constructs .

APPENDIX ABORSTAL NO. _____

DATE OF 1st TESTING _____ DATE of 2nd TESTING _____

Intelligence Group: I II III

INFORMATION:Previous Convictions

Children's Home

Cond. Res/Att.

Detention Centre

Probation

Mental Hospital

Medical Supervision

Approved School

Cond. Discharge

Offences : Past :

Present :

Physical Defects :Psychological Report :Psychiatric Report :Recommended Training and Care :Family Background :General Remarks :BACKGROUND DATA COLLECTION FORM

NAME No. DATE

CONCEPT

Bad	Good
Beautiful	Ugly
Strong	Weak
Slow	Fast
Useful	Worthless
Cruel	Kind
Smooth	Rough
Passive	Active
Unpleasant	Pleasant
Soft	Hard
Relaxed	Tense
Awful	Nice
Rugged	Delicate
Calm	Excitable
Unfair	Fair
Mild	Intense
Changeable	Unchangeable
Positive	Negative
Complex	Simple
Masculine	Feminine

APPENDIX B (contd)THE SEMANTIC DIFFERENTIAL CONCEPTS INTHE ORDER OF PRESENTATION

A. .Holiday (Practice Concept)

1. I Am.
2. The Police.
3. Love.
4. My Father.
5. Excitement.
6. My Mother.
7. Work.
8. Guilty Feelings.
9. Family.
10. Discipline.
11. My Offence.
12. My Mates.
13. Aggression.
14. Other People Are.
15. Borstal Training.
16. Sex.
17. Life Outside.
18. Prison Officers.
19. The Law.
20. I Would Like to Be.

APPENDIX C1

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept: MYSELF

Scales:	Factor Loadings						h ²
	I	II	III	IV	V	VI	
1. Good-Bad	37	04	-02	-09	05	72	68
2. Beautiful-Ugly	-12	31	-12	08	31	60	60
3. Useful-Worthless	18	49	-26	00	-01	40	51
4. Kind-Cruel	70	10	-13	-02	36	-03	66
5. Pleasant-Unpleasant	85	05	04	12	01	13	76
6. Nice-Awful	59	02	-03	04	08	48	60
7. Fair-Unfair	56	47	06	-13	31	12	68
8. Changeable-Unchangeable	33	02	01	70	04	-10	62
9. Positive-Negative	04	21	-60	-25	-14	-08	51
10. Strong-Weak	08	60	-24	16	-26	05	52
11. Rough-Smooth	-47	33	25	-08	-32	-34	63
12. Hard-Soft	-25	09	-01	-16	-72	11	64
13. Rugged-Delicate	-16	04	-04	00	-80	-18	71
14. Intense-Mild	-29	15	63	04	-05	-11	53
15. Masculine-Feminine	-03	22	-10	32	-56	-22	53
16. Fast-Slow	00	74	-06	14	-03	14	60
17. Active-Passive	21	57	09	-30	-36	-13	63
18. Tense-Relaxed	-07	04	69	-00	19	-39	67
19. Excitable-Calm	23	-24	70	-09	-13	10	65
20. Complex-Simple	-08	04	04	77	-00	05	61
Eigenvalues:	4.04	2.81	1.77	1.48	1.24	1.06	
Percentage of Variance:	20.20	14.05	8.85	7.40	6.20	5.30	

APPENDIX C2

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : MY IDEAL SELF

Scales:	Factor Loadings						
	I	II	III	IV	V	VI	h^2
1. Good-Bad	-67	01	15	27	24	18	65
2. Beautiful-Ugly	-16	04	78	11	-00	-00	66
3. Useful-Worthless	-38	12	54	-33	-19	09	61
4. Kind-Cruel	-81	-14	01	-09	-20	-13	75
5. Pleasant-Unpleasant	-75	-02	26	03	12	01	65
6. Nice-Awful	-79	-15	14	-03	09	-04	69
7. Fair-Unfair	-87	07	01	-12	-01	02	79
8. Changeable-Unchangeable	01	-03	-09	10	-04	89	83
9. Positive-Negative	-11	21	51	-39	27	-03	56
10. Strong-Weak	04	17	72	-13	-14	-06	60
11. Rough-Smooth	47	50	08	42	-01	00	66
12. Hard-Soft	16	59	11	39	-17	-35	71
13. Rugged-Delicate	24	69	12	-16	-03	-10	59
14. Intense-Mild	15	08	-29	30	-61	-07	60
15. Masculine-Feminine	08	71	18	-32	-23	11	72
16. Fast-Slow	-17	40	54	19	-19	-31	66
17. Active-Passive	-10	81	-09	05	04	-00	69
18. Tense-Relaxed	15	18	-71	06	-11	16	61
19. Excitable-Calm	04	-10	-08	69	04	32	60
20. Complex-Simple	-04	13	22	-14	-75	09	67
Eigenvalues:	4.75	3.55	1.69	1.31	1.18	1.13	
Percentage Of Variance:	23.75	17.75	8.45	6.55	6.90	5.65	

APPENDIX C3

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : MY FATHER

Scales:	Factor Loadings						h ²
	I	II	III	IV	V	VI	
1. Good-Bad	-86	-04	-03	-11	03	-26	83
2. Beautiful-Ugly	-54	-14	-08	-20	40	-23	58
3. Useful-Worthless	-78	09	-18	28	23	05	79
4. Kind-Cruel	-84	-11	-15	-03	10	-05	76
5. Pleasant-Unpleasant	-90	-06	-00	08	-05	-09	83
6. Nice-Awful	-87	-13	-07	-04	12	-22	85
7. Fair-Unfair	-82	13	-15	04	-28	-05	81
8. Changeable-Unchangeable	-00	00	12	08	83	-05	71
9. Positive-Negative	-21	-17	-09	73	-00	25	69
10. Strong-Weak	-49	22	-36	19	43	-06	66
11. Rough-Smooth	32	73	21	02	-07	17	72
12. Hard-Soft	-03	78	-01	-09	10	-19	67
13. Rugged-Delicate	-04	53	04	53	-10	-14	60
14. Intense-Mild	30	-04	58	-00	-09	-33	55
15. Masculine-Feminine	-19	41	-19	19	03	-37	42
16. Fast-Slow	-43	-04	04	04	24	-68	71
17. Active-Passive	-31	14	-05	-01	-03	-79	75
18. Tense-Relaxed	24	17	75	-02	-16	-06	68
19. Excitable-Calm	02	02	83	-04	26	15	79
20. Complex-Simple	15	08	-01	72	17	-21	64
Eigenvalues:	6.39	2.25	1.86	1.42	1.18	1.02	
Percentage of Variance:	31.95	11.35	9.30	7.10	5.90	5.10	

APPENDIX C4

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : MY MOTHER

Scales:	Factor Loadings						h ²
	I	II	III	IV	V	VI	
1. Good-Bad	-.89	-.06	.10	-.09	-.03	.01	.82
2. Beautiful-Ugly	-.30	-.41	-.02	-.27	-.24	.44	.59
3. Useful-Worthless	-.62	-.37	-.23	-.09	-.11	.24	.66
4. Kind-Cruel	-.80	.00	-.10	-.23	-.06	-.02	.71
5. Pleasant-Unpleasant	-.92	-.07	.03	-.08	-.01	.03	.87
6. Nice-Awful	-.89	-.09	-.09	-.04	.02	-.01	.81
7. Fair-Unfair	-.84	-.11	-.12	-.04	-.14	-.01	.75
8. Changeable-Unchangeable	.01	.20	-.10	-.02	-.09	.80	.70
9. Positive-Negative	-.22	-.22	-.64	-.15	-.07	-.07	.54
10. Strong-Weak	.01	-.21	-.00	.01	-.81	.18	.74
11. Rough-Smooth	.22	.32	.18	.59	.21	-.17	.61
12. Hard-Soft	.22	.05	.14	.71	-.22	-.05	.63
13. Rugged-Delicate	.28	.08	-.19	.59	.24	.08	.55
14. Intense-Mild	.10	.68	-.18	.32	-.02	.03	.62
15. Masculine-Feminine	.30	-.40	-.00	.09	.39	.30	.52
16. Fast-Slow	-.33	.22	-.23	-.01	-.55	-.08	.54
17. Active-Passive	-.45	.00	.00	.41	-.14	.37	.53
18. Tense-Relaxed	.24	.76	.21	.03	.01	.03	.69
19. Excitable-Calm	.10	.71	.09	.00	.20	.25	.63
20. Complex-Simple	.01	-.02	-.80	-.00	-.02	.15	.67
Eigenvalues:	5.96	2.24	1.59	1.21	1.17	1.10	
Percentage of Variance:	29.80	10.20	7.85	6.05	5.85	5.50	

APPENDIX C5

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
 (Principal Component Method) (Varimax)

Concept : MY FAMILY

Scales:	Factor Loadings					h ²
	I	II	III	IV	V	
1. Good-Bad	88	01	08	02	04	80
2. Beautiful-Ugly	60	08	-22	-32	14	54
3. Useful-Worthless	65	09	-21	-23	21	59
4. Kind-Cruel	87	01	-11	-00	01	77
5. Pleasant-Unpleasant	86	-02	-07	-09	12	78
6. Nice-Awful	86	-04	-04	-11	10	77
7. Fair-Unfair	82	16	-07	-05	00	71
8. Changeable-Unchangeable	06	07	08	-46	-47	45
9. Positive-Negative	36	-09	-25	-48	-07	44
10. Strong-Weak	52	19	-24	-39	21	57
11. Rough-Smooth	-41	-09	49	46	04	64
12. Hard-Soft	-04	00	79	-11	19	69
13. Rugged-Delicate	-10	35	53	16	-28	53
14. Intense-Mild	-06	-78	09	19	-00	67
15. Masculine-Feminine	00	22	01	-71	13	57
16. Fast-Slow	56	01	16	-15	44	57
17. Active-Passive	21	03	16	-08	77	68
18. Tense-Relaxed	-23	-38	44	00	-47	62
19. Excitable-Calm	-04	-79	-11	-04	-05	65
20. Complex-Simple	12	-15	34	-58	04	50
Eigenvalues:	6.57	1.72	1.65	1.48	1.18	
Percentage of Variance:	31.85	8.60	8.25	7.90	5.90	

APPENDIX C6.

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : DISCIPLINE

Scales:	Factor Loadings					h^2
	I	II	III	IV	V	
1. Good-Bad	03	-85	13	02	02	75
2. Beautiful-Ugly	55	-41	-00	00	-19	52
3. Useful-Worthless	-02	-80	-26	-05	-08	73
4. Kind-Cruel	33	-58	-13	-18	08	50
5. Pleasant-Unpleasant	62	-51	08	-04	04	66
6. Nice-Awful	47	-58	-17	-25	-15	68
7. Fair-Unfair	24	-73	08	-00	-07	61
8. Changeable-Unchangeable	06	-18	-23	-75	10	66
9. Positive-Negative	04	-45	-19	52	-03	52
10. Strong-Weak	-04	-31	-68	15	03	59
11. Rough-Smooth	-72	17	17	14	21	65
12. Hard-Soft	-73	07	-19	14	14	63
13. Rugged-Delicate	-46	12	00	14	55	56
14. Intense-Mild	-63	25	-20	12	14	55
15. Masculine-Feminine	-08	07	-33	65	06	55
16. Fast-Slow	-14	-26	-45	40	29	55
17. Active-Passive	-76	-22	03	-23	-17	72
18. Tense-Relaxed	-53	29	26	16	24	53
19. Excitable-Calm	-04	02	-03	-06	91	84
20. Complex-Simple	03	16	-77	-10	-01	63

Eigenvalues:	5.64	2.66	2.16	1.62	1.38
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Percentage Of Variance:	28.20	13.30	10.80	8.10	6.90
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APPENDIX C7

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : THE POLICE

Scales:	Factor Loadings					h^2
	I	II	III	IV	V	
1. Good-Bad	70	41	-03	21	-02	71
2. Beautiful-Ugly	70	12	01	39	-09	68
3. Useful-Worthless	49	47	-14	52	-08	77
4. Kind-Cruel	84	17	-20	08	05	79
5. Pleasant-Unpleasant	80	04	-09	00	00	66
6. Nice-Awful	86	02	01	04	-01	75
7. Fair-Unfair	82	09	-19	-01	07	74
8. Changeable-Unchangeable	-07	18	39	48	08	44
9. Positive-Negative	15	02	-09	15	73	59
10. Strong-Weak	24	68	-14	29	19	67
11. Rough-Smooth	-39	16	20	-54	20	56
12. Hard-Soft	-13	61	06	07	45	61
13. Rugged-Delicate	-33	23	31	-21	35	43
14. Intense-Mild	-36	-10	57	-10	29	57
15. Masculine-Feminine	-06	33	-00	-07	71	62
16. Fast-Slow	28	69	-22	06	-00	62
17. Active-Passive	21	74	12	-23	11	68
18. Tense-Relaxed	-05	-06	76	-00	03	58
19. Excitable-Calm	-16	-04	77	03	-17	66
20. Complex-Simple	11	01	09	66	49	71
Eigenvalues:	6.04	2.90	1.69	1.26	1.02	
Percentage of Variance:	30.20	14.50	8.45	6.30	5.10	

APPENDIX C8

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : THE LAW

Scales:	Factor Loadings					h^2
	I	II	III	IV	V	
1. Good-Bad	59	04	09	06	45	57
2. Beautiful-Ugly	63	00	03	37	05	55
3. Useful-Worthless	56	20	-10	14	52	67
4. Kind-Cruel	84	00	-00	-03	05	71
5. Pleasant-Unpleasant	86	-02	-10	-02	09	77
6. Nice-Awful	89	-09	-11	-03	03	82
7. Fair-Unfair	81	-04	-19	-01	16	72
8. Changeable-Unchangeable	05	-05	08	78	17	66
9. Positive-Negative	04	10	-59	-06	42	55
10. Strong-Weak	25	48	-28	10	51	65
11. Rough-Smooth	-58	00	21	-38	03	54
12. Hard-Soft	-06	73	-03	-01	09	55
13. Rugged-Delicate	-31	64	09	-11	-05	54
14. Intense-Mild	-29	31	41	16	39	53
15. Masculine-Feminine	14	70	-12	-14	14	57
16. Fast-Slow	41	38	-17	-01	39	50
17. Active-Passive	43	17	09	-45	51	70
18. Tense-Relaxed	-18	51	27	23	-11	44
19. Excitable-Calm	-17	-03	84	00	09	74
20. Complex-Simple	07	-09	10	25	67	53

Eigenvalues:	5.88	2.71	1.63	1.14	1.03
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Percentage of Variance:	24.40	13.55	8.15	5.70	5.15
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APPENDIX C9

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
 (Principal Component Method) (Varimax)

Concept : PRISON OFFICERS

Scales:	Factor Loadings						h^2
	I	II	III	IV	V	VI	
1. Good-Bad	89	-04	-02	-00	02	-02	79
2. Beautiful-Ugly	68	-13	-12	-12	09	30	61
3. Useful-Worthless	74	12	-28	-00	23	-04	70
4. Kind-Cruel	84	04	03	-01	06	09	73
5. Pleasant-Unpleasant	86	-11	09	-03	15	13	81
6. Nice-Awful	83	-12	-11	-05	02	12	75
7. Fair-Unfair	86	-03	-05	-06	08	-07	76
8. Changeable-Unchangeable	06	-11	-36	51	15	13	46
9. Positive-Negative	25	00	11	-20	81	-08	78
10. Strong-Weak	67	16	-33	-11	13	-02	62
11. Rough-Smooth	-28	-02	00	01	-07	-84	80
12. Hard-Soft	16	38	01	11	06	-71	71
13. Rugged-Delicate	-23	82	16	-05	09	-04	78
14. Intense-Mild	-12	-02	81	18	01	-02	72
15. Masculine-Feminine	10	77	-31	07	-06	-14	74
16. Fast-Slow	71	10	-23	27	-04	-02	65
17. Active-Passive	45	25	-34	42	16	-31	69
18. Tense-Relaxed	-14	26	22	65	-35	04	70
19. Excitable-Calm	-11	-14	22	73	03	-20	67
20. Complex-Simple	04	09	-23	34	66	23	68
Eigenvalues:	6.67	2.40	1.60	1.34	1.61	1.04	
Percentage Of Variance:	33.35	12.00	8.00	6.70	8.05	5.20	

APPENDIX C10

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : AGGRESSION

Scales:	Factor Loadings				h^2
	I	II	III	IV	
1. Good-Bad	-82	-00	-18	01	70
2. Beautiful-Ugly	-66	-34	-24	07	61
3. Useful-Worthless	-70	-02	-15	-26	59
4. Kind-Cruel	-85	-19	-01	11	77
5. Pleasant-Unpleasant	-86	-06	08	-06	76
6. Nice-Awful	-90	-09	-01	-01	82
7. Fair-Unfair	-81	-17	01	04	69
8. Changeable-Unchangeable	-08	-03	-70	-12	51
9. Positive-Negative	-07	-13	-61	32	51
10. Strong-Weak	-10	13	-73	10	58
11. Rough-Smooth	54	57	-04	-17	66
12. Hard-Soft	57	51	-19	-10	65
13. Rugged-Delicate	54	40	-14	28	56
14. Intense-Mild	11	78	14	11	66
15. Masculine-Feminine	36	39	-51	13	57
16. Fast-Slow	-30	52	-28	21	49
17. Active-Passive	05	71	-19	03	54
18. Tense-Relaxed	32	69	00	-08	59
19. Excitable-Calm	15	81	-03	14	70
20. Complex-Simple	-00	09	-08	91	85
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Eigenvalues:	7.06	2.98	1.72	1.12	
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Percentage of Variance:	35.30	14.90	8.50	5.60	
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APPENDIX C11

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
 (Principal Component Method) (Varimax)

Concept : LOVE

Scales:	Factor Loadings						h^2
	I	II	III	IV	V	VI	
1. Good-Bad	81	-07	18	-12	06	14	74
2. Beautiful-Ugly	78	-17	01	08	-02	14	66
3. Useful-Worthless	74	-13	06	21	-14	-13	66
4. Kind-Cruel	49	-43	44	-06	-04	07	64
5. Pleasant-Unpleasant	83	-09	12	00	-07	08	73
6. Nice-Awful	56	-01	49	-17	-24	16	67
7. Fair-Unfair	18	-21	73	-21	-07	00	67
8. Changeable-Unchangeable	02	-08	01	77	05	26	68
9. Positive-Negative	67	17	-11	-04	-09	-18	54
10. Strong-Weak	63	-02	12	11	-36	-20	60
11. Rough-Smooth	-24	51	-41	13	44	-10	72
12. Hard-Soft	-19	83	03	-04	09	-06	75
13. Rugged-Delicate	-09	-01	-07	04	85	-13	76
14. Intense-Mild	05	84	-00	02	-22	00	75
15. Masculine-Feminine	-03	04	04	-13	26	-77	69
16. Fast-Slow	10	17	71	23	-12	-05	62
17. Active-Passive	-01	30	50	43	11	-07	55
18. Tense-Relaxed	-35	58	-19	02	42	11	69
19. Excitable-Calm	02	58	09	11	24	52	69
20. Complex-Simple	15	27	-28	52	-01	-22	50

Eigenvalues:	5.62	2.58	1.71	1.27	1.19	1.02
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Percentage of Variance:	28.10	14.90	8.55	6.35	5.95	5.10
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APPENDIX C12

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
 (Principal Component Method) (Varimax)

Concept : EXCITEMENT

Scales:	Factor Loadings						h^2
	I	II	III	IV	V	VI	
1. Good-Bad	-76	14	07	-03	-04	-08	61
2. Beautiful-Ugly	-45	-21	05	-48	-25	09	56
3. Useful-Worthless	-70	-13	-31	-19	07	07	66
4. Kind-Cruel	-56	-05	-07	-06	-03	59	68
5. Pleasant-Unpleasant	-71	23	07	-15	-15	19	66
6. Nice-Awful	-82	16	05	06	-05	01	71
7. Fair-Unfair	-72	-02	01	06	22	44	78
8. Changeable-Unchangeable	22	21	-38	-14	16	46	50
9. Positive-Negative	-26	05	-02	-69	-34	11	68
10. Strong-Weak	-41	10	-67	-14	-15	-02	69
11. Rough-Smooth	27	18	-03	06	39	-57	60
12. Hard-Soft	05	02	-00	18	82	-20	75
13. Rugged-Delicate	09	19	-12	-11	29	-67	61
14. Intense-Mild	-11	79	02	-26	19	-11	77
15. Masculine-Feminine	24	-12	-80	-10	07	-05	74
16. Fast-Slow	-29	46	-47	30	23	15	70
17. Active-Passive	-21	14	-10	-22	69	03	61
18. Tense-Relaxed	37	53	19	-14	40	-00	65
19. Excitable-Calm	-14	85	-03	03	-09	-07	76
20. Complex-Simple	12	24	-21	-75	22	-09	75
Eigenvalues:	4.74	3.10	1.79	1.62	1.22	1.04	
Percentage of Variance:	23.70	15.50	8.95	8.10	6.20	5.20	

APPENDIX C13

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : GUILTY FEELINGS

Scales:	Factor Loadings							
	I	II	III	IV	V	VI	VII	h^2
1. Good-Bad	18	09	-02	-08	02	15	-70	56
2. Beautiful-Ugly	08	-02	-29	03	20	-09	-68	64
3. Useful-Worthless	28	21	11	-08	66	11	-37	74
4. Kind-Cruel	57	23	-01	10	07	-00	-57	72
5. Pleasant-Unpleasant	76	16	-01	-03	08	08	-14	65
6. Nice-Awful	83	09	-06	14	04	05	-16	75
7. Fair-Unfair	20	-13	05	-01	12	17	-74	66
8. Changeable-Unchangeable	-06	10	03	-04	-05	-87	16	80
9. Positive-Negative	05	-29	-16	-08	69	-03	-13	62
10. Strong-Weak	08	-13	-12	-72	42	09	16	78
11. Rough-Smooth	-13	-13	68	-07	-01	-13	26	59
12. Hard-Soft	-09	-26	36	-53	-24	01	13	58
13. Rugged-Delicate	-15	-80	01	-13	-00	18	05	73
14. Intense-Mild	-46	03	36	-12	-02	20	34	53
15. Masculine-Feminine	-26	-57	08	16	26	-31	-16	63
16. Fast-Slow	-21	09	12	-72	-15	-16	-26	72
17. Active-Passive	27	-14	65	-06	11	-07	-25	61
18. Tense-Relaxed	-39	19	63	05	-14	16	06	64
19. Excitable-Calm	-09	25	44	-01	-00	46	38	64
20. Complex-Simple	-49	-00	09	18	54	03	05	59
Eigenvalues:	4.47	2.13	1.90	1.41	1.26	1.06	1.00	
Percentage of Variance:	22.35	10.65	9.50	7.05	6.30	1.30	5.10	

APPENDIX C14

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concent : SEX

Scales:	Factor Loadings						h ²
	I	II	III	IV	V	VI	
1. Good-Bad	-77	04	-08	11	04	-03	62
2. Beautiful-Ugly	-67	01	-19	26	02	-04	56
3. Useful-Worthless	-69	11	05	10	-11	13	53
4. Kind-Cruel	-38	-19	-02	52	-37	-14	62
5. Pleasant-Unpleasant	-79	09	-11	20	08	-08	70
6. Nice-Awful	-75	02	-03	14	-00	23	64
7. Fair-Unfair	-46	-19	-22	48	-05	-01	54
8. Changeable-Unchangeable	01	01	-05	09	08	90	84
9. Positive-Negative	-52	24	09	07	12	-21	40
10. Strong-Weak	-25	00	-07	74	16	02	65
11. Rough-Smooth	28	27	27	-16	49	-14	52
12. Hard-Soft	08	17	68	-22	-03	-10	57
13. Rugged-Delicate	35	-09	70	-16	03	-04	65
14. Intense-Mild	-07	80	-00	-09	17	08	70
15. Masculine-Feminine	-02	-16	64	17	43	-04	66
16. Fast-Slow	-10	14	-01	84	-04	16	77
17. Active-Passive	-42	44	48	11	-19	06	66
18. Tense-Relaxed	40	25	21	-00	22	-30	41
19. Excitable-Calm	-07	78	-02	19	02	-08	66
20. Complex-Simple	-13	11	01	03	81	13	72
Eigenvalues:	5.15	2.46	1.41	1.34	1.51	1.00	
Percentage of Variance:	26.25	12.30	7.05	6.70	7.55	5.00	

APPENDIX C15

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : MY CRIME

Scales:	Factor Loadings						
	I	II	III	IV	V	VI	h^2
1. Good-Bad	-79	19	-08	-17	-06	19	74
2. Beautiful-Ugly	-77	09	-05	-13	-22	06	68
3. Useful-Worthless	-62	24	24	13	-00	-14	55
4. Kind-Cruel	-61	10	20	06	-20	-37	61
5. Pleasant-Unpleasant	-66	-11	-00	32	-21	-17	63
6. Nice-Awful	-85	-04	02	08	06	-20	79
7. Fair-Unfair	-69	-06	16	06	22	-01	56
8. Changeable-Unchangeable	20	-12	-54	21	-22	19	49
9. Positive-Negative	-21	05	52	22	04	55	68
10. Strong-Weak	-20	76	02	-09	-15	14	68
11. Rough-Smooth	40	18	03	08	16	64	65
12. Hard-Soft	11	76	-00	25	05	22	71
13. Rugged-Delicate	35	-02	10	12	49	06	40
14. Intense-Mild	-00	00	-74	36	-02	-07	68
15. Masculine-Feminine	-25	34	10	-01	57	00	52
16. Fast-Slow	-11	50	07	33	32	-27	56
17. Active-Passive	-03	67	-15	08	21	-28	61
18. Tense-Relaxed	36	-03	-27	-03	66	19	75
19. Excitable-Calm	-04	08	-82	-16	16	-03	74
20. Complex-Simple	-02	18	-04	81	00	10	71
Eigenvalues:	4.80	2.56	2.08	1.24	1.09	1.03	
Percentage of Variance:	24.00	12.80	10.40	6.20	5.45	5.15	

APPENDIX C16

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : BORSTAL TRAINING

Scales:	Factor Loadings				h^2
	I	II	III	IV	
1. Good-Bad	-83	06	-03	-01	70
2. Beautiful-Ugly	-66	-32	05	00	54
3. Useful-Worthless	-72	07	-15	23	61
4. Kind-Cruel	-80	-16	11	13	70
5. Pleasant-Unpleasant	-79	-17	02	04	67
6. Nice-Awful	-75	-35	-03	03	69
7. Fair-Unfair	-84	-09	-00	09	73
8. Changeable-Unchangeable	-08	-41	52	16	47
9. Positive-Negative	-08	03	-11	85	74
10. Strong-Weak	-55	12	32	14	45
11. Rough-Smooth	40	57	14	-10	52
12. Hard-Soft	07	64	24	08	48
13. Rugged-Delicate	52	50	17	-07	56
14. Intense-Mild	38	45	-25	-32	52
15. Masculine-Feminine	06	24	44	40	42
16. Fast-Slow	-58	-08	-00	-05	34
17. Active-Passive	-45	65	13	-05	65
18. Tense-Relaxed	31	75	-09	05	68
19. Excitable-Calm	24	22	-38	-57	58
20. Complex-Simple	08	19	75	-13	63
Eigenvalues:	6.63	2.34	1.72	1.08	
Percentage of Variance:	31.15	11.70	8.60	5.40	

APPENDIX C17

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : MY MATES

Scales:	Factor Loadings						h^2
	I	II	III	IV	V	VI	
1. Good-Bad	-73	-03	-12	14	-11	-11	60
2. Beautiful-Ugly	-47	-25	-01	45	50	-08	75
3. Useful-Worthless	-49	04	07	10	-05	-64	68
4. Kind-Cruel	-85	-07	12	-11	02	-04	76
5. Pleasant-Unpleasant	-82	-00	12	09	08	-08	74
6. Nice-Awful	-78	-05	11	11	29	-11	74
7. Fair-Unfair	-70	41	02	-07	02	20	72
8. Changeable-Unchangeable	-24	-05	-02	78	-01	-06	67
9. Positive-Negative	-09	14	07	09	82	05	72
10. Strong-Weak	-03	26	32	35	23	-50	61
11. Rough-Smooth	61	41	-04	00	01	-18	57
12. Hard-Soft	39	63	-16	39	-14	-08	77
13. Rugged-Delicate	34	33	01	63	17	10	67
14. Intense-Mild	16	06	-43	-34	-08	-51	61
15. Masculine-Feminine	25	35	21	26	-36	-26	50
16. Fast-Slow	-22	67	01	05	02	-28	58
17. Active-Passive	-00	84	00	-07	18	01	74
18. Tense-Relaxed	32	08	-65	-00	-11	-04	55
19. Excitable-Calm	01	-00	-81	05	07	05	67
20. Complex-Simple	08	20	-22	-17	54	-44	63
Eigenvalues:	4.91	2.86	1.72	1.49	1.26	1.09	
Percentage of Variance:	24.55	14.30	8.60	7.95	6.30	5.45	

APPENDIX C18

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : OTHER PEOPLE

Scales:	Factor Loadings							
	I	II	III	IV	V	VI	VII	h^2
1. Good-Bad	.33	.33	.08	.10	.10	-.04	.47	.47
2. Beautiful-Ugly	.18	-.04	-.02	-.01	-.20	.13	.73	.64
3. Useful-Worthless	.22	-.05	-.18	-.43	-.22	-.09	.46	.55
4. Kind-Cruel	.76	.12	-.01	.01	-.09	.17	.19	.67
5. Pleasant-Unpleasant	.66	.01	-.03	-.16	-.11	-.22	.38	.68
6. Nice-Awful	.85	-.05	.00	-.07	-.03	-.06	-.00	.74
7. Fair-Unfair	.66	.26	-.12	-.03	-.27	.06	.06	.60
8. Changeable-Unchangeable	.06	-.03	-.03	-.83	.10	.19	.05	.76
9. Positive-Negative	.03	-.12	-.00	-.10	-.16	.79	.08	.69
10. Strong-Weak	.14	-.03	.00	-.32	-.62	.18	.36	.69
11. Rough-Smooth	-.53	-.03	.40	.15	.06	-.27	-.07	.56
12. Hard-Soft	-.17	-.10	.65	-.15	-.06	.46	-.15	.74
13. Rugged-Delicate	-.26	-.60	.07	-.19	-.32	-.35	-.22	.75
14. Intense-Mild	-.14	.04	.16	-.13	.84	-.07	-.05	.78
15. Masculine-Feminine	.02	-.74	.13	-.13	.05	.20	.28	.71
16. Fast-Slow	.29	.28	.31	-.35	-.42	-.04	.06	.58
17. Active-Passive	.05	.61	.14	-.43	-.04	-.22	.25	.70
18. Tense-Relaxed	-.10	-.03	.71	.27	.19	-.11	.17	.67
19. Excitable-Calm	.36	.02	.52	-.08	.33	-.17	-.26	.62
20. Complex-Simple	.10	.02	-.16	-.54	-.26	-.16	-.17	.47
Eigenvalues:	4.39	2.20	1.65	1.54	1.24	1.10	1.03	
Percentage of Variance:	21.95	12.00	8.25	7.70	6.20	5.50	5.15	

APPENDIX C19

FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : WORK

Scales:	Factor Loadings					h ²
	I	II	III	IV	V	
1. Good-Bad	84	00	12	-00	05	73
2. Beautiful-Ugly	72	15	07	-13	-36	71
3. Useful-Worthless	60	00	21	14	09	43
4. Kind-Cruel	79	14	-00	01	-22	70
5. Pleasant-Unpleasant	82	19	13	08	09	74
6. Nice-Awful	88	11	-01	-00	02	80
7. Fair-Unfair	88	02	08	10	10	81
8. Changeable-Unchangeable	13	-08	68	-28	-23	63
9. Positive-Negative	14	12	73	-08	21	62
10. Strong-Weak	44	08	37	07	29	43
11. Rough-Smooth	-29	-71	-10	-09	33	73
12. Hard-Soft	-11	-75	11	01	12	61
13. Rugged-Delicate	-20	-21	-01	-28	55	48
14. Intense-Mild	-07	-50	-39	-49	02	65
15. Masculine-Feminine	19	-24	04	-03	75	67
16. Fast-Slow	75	-17	14	-13	07	65
17. Active-Passive	24	-48	46	18	-02	54
18. Tense-Relaxed	-22	-71	-00	-20	07	61
19. Excitable-Calm	15	-63	-12	08	00	45
20. Complex-Simple	00	-03	15	-88	06	81

Eigenvalues:	6.08	3.03	1.46	1.22	1.07
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Percentage of Variance:	30.40	15.15	7.30	6.10	5.35
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FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

Concept : LIFE OUTSIDE

Scales:	Factor Loadings					h^2
	I	II	II	IV	V	
1. Good-Bad	82	12	02	03	-09	70
2. Beautiful-Ugly	72	-13	-03	-24	-27	67
3. Useful-Worthless	68	-17	30	23	02	65
4. Kind-Cruel	81	-36	01	06	09	80
5. Pleasant-Unpleasant	82	-10	19	05	-03	73
6. Nice-Awful	80	-11	02	-03	-11	68
7. Fair-Unfair	79	-27	03	14	16	75
8. Changeable-Unchangeable	20	12	79	-02	-07	69
9. Positive-Negative	12	-24	64	09	-11	51
10. Strong-Weak	42	-35	12	26	-30	48
11. Rough-Smooth	-38	69	04	06	11	64
12. Hard-Soft	-21	65	-07	44	16	70
13. Rugged-Delicate	-13	31	-07	43	-36	44
14. Intense-Mild	-08	78	02	-05	-26	69
15. Masculine-Feminine	18	09	06	50	-44	49
16. Fast-Slow	42	-01	00	29	-59	61
17. Active-Passive	10	04	02	85	-04	74
18. Tense-Relaxed	-40	60	03	03	-05	52
19. Excitable-Calm	11	46	-26	15	-42	49
20. Complex-Simple	-20	09	40	-06	-67	67

Eigenvalues:	6.20	2.88	1.46	.120	1.01
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Percentage Of Variance:	31.00	14.40	7.30	6.00	5.05
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FACTOR-ANALYSIS OF SCALES : ROTATED LOADINGS
(Principal Component Method) (Varimax)

ALL CONCEPTS

Scales:	Factor Loadings				h^2
	I	II	III	IV	
1. Good-Bad	82	06	02	00	67
2. Beautiful-Ugly	73	-15	-12	16	61
3. Useful-Worthless	70	19	-15	17	59
4. Kind-Cruel	82	-10	-12	00	70
5. Pleasant-Unpleasant	85	-09	-04	04	73
6. Nice-Awful	87	-10	-03	01	77
7. Fair-Unfair	81	03	-10	-05	67
8. Changeable-Unchangeable	11	-14	17	60	42
9. Positive-Negative	22	14	-32	41	35
10. Strong-Weak	41	43	-22	31	51
11. Rough-Smooth	-55	43	24	-09	56
12. Hard-Soft	-31	68	16	-03	59
13. Rugged-Delicate	-43	53	-01	06	47
14. Intense-Mild	-22	16	65	12	52
15. Masculine-Feminine	-12	59	-20	22	45
16. Fast-Slow	49	45	09	10	46
17. Active-Passive	26	61	19	-06	49
18. Tense-Relaxed	-41	15	56	-04	51
19. Excitable-Calm	01	-02	77	06	60
20. Complex-Simple	00	10	08	74	57

Eigenvalues: 6.27 2.38 1.51 1.50

Percentage of Variance: 31.35 11.90 7.55 5.75

APPENDIX D.(a) 1.1

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	.550	1.650	6.96
2. IDEAL SELF	.717	2.420	12.09
3. FATHER	.352	.227	2.76
4. MOTHER	-.253	.535	2.15
5. FAMILY	-.632	.336	1.93
6. DISCIPLINE	1.373	1.236	2.40
7. POLICE	.150	.778	3.31
8. LAW	1.137	.987	4.01
9. PRISON OFFICERS	-3.238	1.558	5.96
10. AGGRESSION	-2.765	1.852	4.07
11. LOVE	-.235	.378	5.35
12. EXCITEMENT	-1.686	.278	1.83
13. GUILTY FEELINGS	.372	.177	4.83
14. SEX	-.297	.278	2.82
15. MY OFFENCE	3.735	3.547	17.69
16. BORSTAL TRAINING	1.395	.959	4.52
17. MY MATES	-2.689	.835	6.25
18. OTHER PEOPLE	1.332	.478	4.47
19. WORK	.973	.563	2.37
20. LIFE OUTSIDE	-.850	.928	4.21

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	7.1356	43.27
2	4.3367	13.58
3	1.2057	9.36

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTS
WITH THREE PRINCIPAL COMPONENTS

APPENDIX D. (a) 1.2

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	1.099	.813	4.06
2. IDEAL SELF	1.043	.896	4.48
3. FATHER	.386	.615	3.00
4. MOTHER	.561	.632	3.16
5. FAMILY	-1.583	.804	4.02
6. DISCIPLINE	-1.784	1.374	6.87
7. POLICE	1.226	.822	4.11
8. LAW	.300	.581	2.91
9. PRISON OFFICERS	2.894	1.546	7.73
10. AGGRESSION	.130	.685	3.42
11. LOVE	-1.295	1.564	7.82
12. EXCITEMENT	-2.627	1.432	7.16
13. GUILTY FEELINGS	2.240	1.866	9.33
14. SEX	-2.504	1.237	6.18
15. MY OFFENCE	-1.946	.699	3.50
16. BORSTAL TRAINING	.197	.751	3.76
17. MY MATES	1.910	.673	3.37
18. OTHER PEOPLE	-1.129	1.468	7.34
19. WORK	.383	.566	2.83
20. LIFE OUTSIDE	.499	.975	4.88

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	6.6884	33.44
2	2.5404	12.70
3	2.0021	10.01

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTSWITH THREE PRINCIPAL COMPONENTS

APPENDIX D.(a) 1.3

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	.253	.713	3.56
2. IDEAL SELF	-2.389	1.026	5.13
3. FATHER	.713	1.040	5.20
4. MOTHER	-.917	.509	2.54
5. FAMILY	1.747	1.107	5.54
6. DISCIPLINE	-.378	1.151	5.75
7. POLICE	.278	1.347	6.74
8. LAW	.070	.991	4.96
9. PRISON OFFICERS	1.158	.979	4.89
10. AGGRESSION	1.473	1.506	7.53
11. LOVE	-1.645	.858	4.29
12. EXCITEMENT	-.792	1.219	6.10
13. GUILTY FEELINGS	-.295	.909	4.54
14. SEX	1.369	.866	4.03
15. MY OFFENCE	1.177	1.493	7.47
16. BORSTAL TRAINING	.139	.567	2.83
17. MY MATES	.397	1.027	5.13
18. OTHER PEOPLE	.597	.671	3.35
19. WORK	-.115	.846	4.23
20. LIFE OUTSIDE	-2.841	1.174	5.87

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	5.9252	29.63
2	2.8170	14.09
3	2.2317	11.16

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTS

WITH THREE PRINCIPAL COMPONENTS

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	1.488	.947	4.74
2. IDEAL SELF	.347	1.054	5.27
3. FATHER	-1.444	1.588	7.94
4. MOTHER	-1.861	.661	3.31
5. FAMILY	1.348	.498	2.49
6. DISCIPLINE	-2.395	1.512	7.56
7. POLICE	1.430	1.146	5.73
8. LAW	1.312	.789	3.94
9. PRISON OFFICERS	-.823	.383	1.91
10. AGGRESSION	1.208	1.211	6.05
11. LOVE	-1.127	1.217	6.08
12. EXCITEMENT	.146	.489	2.45
13. GUILTY FEELINGS	.853	.654	3.27
14. SEX	.350	1.797	8.98
15. MY OFFENCE	3.545	1.672	8.36
16. BORSTAL TRAINING	-1.016	1.415	7.07
17. MY MATES	-1.135	.830	4.15
18. OTHER PEOPLE	.596	.740	3.70
19. WORK	-1.250	.516	2.58
20. LIFE OUTSIDE	-1.572	.882	4.41

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	5.8910	29.46
2	3.4346	17.17
3	2.3600	11.80

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTSWITH THREE PRINCIPAL COMPONENTS

APPENDIX D. (a) 2.2

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	2.234	1.029	5.14
2. IDEAL SELF	-.752	.795	3.98
3. FATHER	-1.153	.803	4.02
4. MOTHER	.335	1.484	7.42
5. FAMILY	-1.166	.583	2.91
6. DISCIPLINE	-2.413	2.121	10.60
7. POLICE	.705	.679	3.40
8. LAW	-.247	1.122	5.61
9. PRISON OFFICERS	2.112	.895	4.48
10. AGGRESSION	-.168	1.253	6.26
11. LOVE	-1.144	.599	2.99
12. EXCITEMENT	.032	1.051	5.25
13. GUILTY FEELINGS	1.763	.759	3.79
14. SEX	.165	.799	3.99
15. MY OFFENCE	1.532	1.659	8.29
16. BORSTAL TRAINING	-1.126	1.100	5.50
17. MY MATES	.731	.671	3.36
18. OTHER PEOPLE	-1.431	1.315	6.57
19. WORK	.651	.803	4.02
20. LIFE OUTSIDE	-.658	.481	2.40

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	6.5332	32.67
2	2.5398	12.70
3	1.9243	9.62

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTSWITH THREE PRINCIPAL COMPONENTS

APPENDIX D.(a) 2.3

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	1.099	.917	4.58
2. IDEAL SELF	2.701	1.026	5.13
3. FATHER	1.007	.622	3.11
4. MOTHER	-.142	1.121	5.60
5. FAMILY	1.217	.966	4.83
6. DISCIPLINE	-1.977	1.598	7.99
7. POLICE	-.720	.698	3.49
8. LAW	-1.167	.624	3.12
9. PRISON OFFICERS	.271	.946	4.73
10. AGGRESSION	1.371	1.177	5.88
11. LOVE	-2.318	1.350	6.75
12. EXCITEMENT	-.304	.519	2.60
13. GUILTY FEELINGS	-.206	.428	2.14
14. SEX	.618	1.105	5.53
15. MY OFFENCE	1.873	.435	2.17
16. BORSTAL TRAINING	-.257	1.899	9.50
17. MY MATES	-.411	1.148	5.74
18. OTHER PEOPLE	-.275	1.025	5.13
19. WORK	-1.141	.904	4.52
20. LIFE OUTSIDE	-1.236	1.491	7.46

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	5.1724	25.86
2	3.4058	17.03
3	2.4043	12.02

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTSWITH THREE PRINCIPAL COMPONENTS

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	3.116	1.035	5.17
2. IDEAL SELF	.142	.533	2.66
3. FATHER	.848	.726	3.63
4. MOTHER	-.984	1.117	5.59
5. FAMILY	.770	1.108	5.54
6. DISCIPLINE	-1.520	1.001	5.00
7. POLICE	3.089	2.391	11.95
8. LAW	1.076	.622	3.11
9. PRISON OFFICERS	-1.547	.793	3.96
10. AGGRESSION	-.712	1.546	7.73
11. LOVE	-.967	.970	4.85
12. EXCITEMENT	-1.891	1.297	6.48
13. GUILTY FEELINGS	.694	.832	4.16
14. SEX	-.095	.660	3.30
15. MY OFFENCE	-1.689	.858	4.29
16. BORSTAL TRAINING	-.125	.974	4.87
17. MY MATES	3.140	1.141	5.71
18. OTHER PEOPLE	-1.441	1.365	6.82
19. WORK	-1.399	.424	2.12
20. LIFE OUTSIDE	-.504	.608	3.04

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	6.2117	31.06
2	2.8694	14.35
3	2.1448	10.72

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTSWITH THREE PRINCIPAL COMPONENTS

APPENDIX D.(a) 3.2

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	-.534	.835	4.18
2. IDEAL SELF	-1.069	.491	2.45
3. FATHER	-1.877	1.147	5.73
4. MOTHER	-.202	.480	2.40
5. FAMILY	-.249	.487	2.44
6. DISCIPLINE	.209	.546	2.73
7. POLICE	-2.357	1.051	5.25
8. LAW	1.246	.738	3.69
9. PRISON OFFICERS	4.500	1.595	7.98
10. AGGRESSION	2.869	1.756	8.78
11. LOVE	.074	2.391	11.96
12. EXCITEMENT	-2.469	.795	3.98
13. GUILTY FEELINGS	.869	1.034	5.17
14. SEX	-.691	.930	4.65
15. MY OFFENCE	1.944	.684	3.42
16. BORSTAL TRAINING	-.963	.535	2.67
17. MY MATES	1.864	.884	4.42
18. OTHER PEOPLE	-1.977	1.731	8.65
19. WORK	-1.897	1.166	5.83
20. LIFE OUTSIDE	.709	.724	3.62

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	5.2273	26.14
2	3.1039	15.52
3	2.3365	11.68

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTSWITH THREE PRINCIPAL COMPONENTS

APPENDIX D.(a) 3.3

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	-.241	.948	4.74
2. IDEAL SELF	.334	.860	4.30
3. FATHER	.940	.590	2.95
4. MOTHER	2.357	1.236	6.18
5. FAMILY	3.017	.876	4.38
6. DISCIPLINE	-2.467	1.117	5.58
7. POLICE	-1.444	.940	4.70
8. LAW	-.835	1.138	5.69
9. PRISON OFFICERS	-.309	.686	3.43
10. AGGRESSION	.228	.911	4.56
11. LOVE	-.345	.734	3.67
12. EXCITEMENT	1.793	1.281	6.41
13. GUILTY FEELINGS	-1.658	1.212	6.06
14. SEX	-1.342	.886	4.43
15. MY OFFENCE	-.450	.829	4.15
16. BORSTAL TRAINING	-2.570	2.546	12.73
17. MY MATES	-.424	1.126	5.63
18. OTHER PEOPLE	-.044	.471	2.35
19. WORK	1.699	.749	3.74
20. LIFE OUTSIDE	1.363	.864	4.32

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	4.5096	22.55
2	3.5368	17.68
3	2.6142	13.07

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTS

WITH THREE PRINCIPAL COMPONENTS

APPENDIX D. (a) 4.1

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	-.826	1.536	7.68
2. IDEAL SELF	-1.050	1.216	6.08
3. FATHER	.082	.413	2.07
4. MOTHER	-2.043	1.192	5.96
5. FAMILY	1.990	1.050	5.25
6. DISCIPLINE	2.203	1.316	6.58
7. POLICE	-2.479	2.222	11.11
8. LAW	-2.886	1.681	8.40
9. PRISON OFFICERS	1.216	.456	2.28
10. AGGRESSION	.367	1.353	6.76
11. LOVE	-.011	1.196	5.98
12. EXCITEMENT	-1.276	.870	4.35
13. GUILTY FEELINGS	1.854	.901	4.50
14. SEX	-.699	.526	2.63
15. MY OFFENCE	.684	.683	3.42
16. BORSTAL TRAINING	-1.807	1.390	6.95
17. MY MATES	.532	.436	2.18
18. OTHER PEOPLE	2.511	.538	2.69
19. WORK	2.102	.699	3.50
20. LIFE OUTSIDE	-.465	.326	1.63

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	5.5377	27.69
2	3.0352	15.18
3	2.4793	12.40

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTSWITH THREE PRINCIPAL COMPONENTS

APPENDIX D.(a) 4.2

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	.183	1.282	6.41
2. IDEAL SELF	.956	1.013	5.06
3. FATHER	1.508	1.473	7.36
4. MOTHER	-.287	.387	1.93
5. FAMILY	-3.020	1.059	5.29
6. DISCIPLINE	.678	.505	2.52
7. POLICE	1.494	.673	3.37
8. LAW	4.277	2.755	13.79
9. PRISON OFFICERS	.287	.876	4.38
10. AGGRESSION	.065	.482	2.41
11. LOVE	-.209	.371	1.85
12. EXCITEMENT	.063	.531	2.66
13. GUILTY FEELINGS	.532	.069	.34
14. SEX	-.104	.235	1.18
15. MY OFFENCE	.772	2.213	11.07
16. BORSTAL TRAINING	-4.857	2.315	11.55
17. MY MATES	-.541	1.344	6.72
18. OTHER PEOPLE	.751	.262	1.31
19. WORK	-1.666	1.012	5.06
20. LIFE OUTSIDE	-7.623	1.141	5.70

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	5.6229	28.11
2	3.5175	17.59
3	2.5282	12.64

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTS

WITH THREE PRINCIPAL COMPONENTS

APPENDIX D.(a) 4.3

<u>ELEMENT</u>	<u>TOTAL</u>	<u>SUM OF SQUARES</u>	<u>AS PER CENT</u>
1. SELF	2.869	1.382	6.91
2. IDEAL SELF	-1.570	1.007	5.03
3. FATHER	-.010	.593	2.96
4. MOTHER	2.465	1.349	6.75
5. FAMILY	1.487	1.027	5.13
6. DISCIPLINE	-.715	.758	3.79
7. POLICE	-2.269	1.255	6.27
8. LAW	-.527	1.283	6.42
9. PRISON OFFICERS	-2.464	1.016	5.08
10. AGGRESSION	-.132	.294	1.47
11. LOVE	-.586	.669	3.34
12. EXCITEMENT	-2.018	1.279	6.39
13. GUILTY FEELINGS	.031	.733	3.67
14. SEX	.602	.956	4.78
15. MY OFFENCE	.542	1.323	6.61
16. BORSTAL TRAINING	-.606	1.429	7.14
17. MY MATES	1.054	1.476	7.38
18. OTHER PEOPLE	.525	.375	1.87
19. WORK	-.929	.880	4.40
20. LIFE OUTSIDE	2.251	.917	4.58

PRINCIPAL COMPONENT ANALYSIS

<u>COMPONENT</u>	<u>LATENT ROOT</u>	<u>AS PER CENT</u>
1	5.3484	26.74
2	2.6184	13.09
3	2.4618	12.31

OVERALL CHANGE OBSERVED IN INDIVIDUAL ELEMENTSWITH THREE PRINCIPAL COMPONENTS

<u>ELEMENT</u>		<u>LOADINGS</u>		
		<u>COMPONENT</u>	<u>COMPONENT</u>	<u>COMPONENT</u>
		1	2	3
1.	SELF	-.12	.67	-.11
2.	IDEAL SELF	-.85	.27	.12
3.	FATHER	-.05	.12	.09
4.	MOTHER	-.03	-.18	.01
5.	FAMILY	-.20	.00	-.14
6.	DISCIPLINE	-.17	.00	.08
7.	POLICE	.34	.01	.00
8.	LAW	.42	-.15	.10
9.	PRISON OFFICERS	-.06	.14	-.54
10.	AGGRESSION	.14	-.14	-.28
11.	LOVE	-.52	-.09	.23
12.	EXCITEMENT	.03	-.23	-.16
13.	GUILTY FEELINGS	.09	.05	.14
14.	SEX	-.33	-.08	.12
15.	MY OFFENCE	1.05	.34	.05
16.	BORSTAL TRAINING	.49	-.11	.13
17.	MY MATES	-.31	-.36	-.22
18.	OTHER PEOPLE	.44	-.20	.10
19.	WORK	-.15	.09	.19
20.	LIFE OUTSIDE	-.20	-.12	.08

CONSTRUCTS

1.	GOOD-BAD	.51	.49	.03
2.	BEAUTIFUL-UGLY	.11	.00	.09
3.	USEFUL-WORTHLESS	.48	.18	.20
4.	KIND-CRUEL	.41	.38	.00
5.	PLEASANT-UNPLEASANT	.61	.26	.02
6.	NICE-AWFUL	.25	.00	.08
7.	FAIR-UNFAIR	.46	-.01	.12
8.	CHANGEABLE- UNCHANGEABLE	-.04	-.13	.19
9.	POSITIVE-NEGATIVE	.02	-.01	-.07
10.	STRONG-WEAK	.66	-.22	.28
11.	ROUGH-SMOOTH	-.12	.47	.10
12.	HARD-SOFT	.00	-.06	.05
13.	RUGGED-DELICATE	-.28	-.07	.14
14.	INTENSE-MILD	.08	.28	.30
15.	MASCULINE-FEMININE	-.16	.04	.51
16.	FAST-SLOW	-.44	.17	.15
17.	ACTIVE-PASSIVE	-.67	.27	.08
18.	TENSE-RELAXED	-.48	.06	.26
19.	EXCITABLE-CALM	-.40	.00	-.05
20.	COMPLEX-SIMPLE	-.28	.31	.05

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

<u>ELEMENTS</u>		<u>LOADINGS</u>		
		<u>COMPONENT</u>	<u>COMPONENT</u>	<u>COMPONENT</u>
		1	2	3
1.	SELF	-.07	-.53	.13
2.	IDEAL SELF	.56	-.38	-.13
3.	FATHER	-.11	.30	-.39
4.	MOTHER	.03	-.11	-.39
5.	FAMILY	.17	.47	-.09
6.	DISCIPLINE	.60	-.02	-.08
7.	POLICE	-.37	-.37	.29
8.	LAW	-.48	-.01	.41
9.	PRISON OFFICERS	-1.00	-.31	.00
10.	AGGRESSION	-.34	.17	.40
11.	LOVE	1.06	-.06	.03
12.	EXCITEMENT	.57	.71	-.25
13.	GUILTY FEELINGS	-1.03	.15	-.65
14.	SEX	.47	.43	.39
15.	MY OFFENCE	.41	.31	.15
16.	BORSTAL TRAINING	.14	.29	.42
17.	MY MATES	-.60	-.09	-.30
18.	OTHER PEOPLE	-.83	.46	.43
19.	WORK	.20	-.29	-.22
20.	LIFE OUTSIDE	.62	-.53	-.14

CONSTRUCTS

1.	GOOD-BAD	-.76	-.35	.10
2.	BEAUTIFUL-UGLY	-.45	-.49	-.08
3.	USEFUL-WORTHLESS	-.65	-.36	.05
4.	KIND-CRUEL	-.73	.11	-.08
5.	PLEASANT-UNPLEASANT	-.81	.07	-.17
6.	NICE-AWFUL	-.87	.15	-.07
7.	FAIR-UNFAIR	-.87	.05	-.19
8.	CHANGEABLE- UNCHANGABLE	.40	-.35	-.21
9.	POSITIVE-NEGATIVE	-.24	-.27	.71
10.	STRONG-WEAK	-.58	-.46	-.24
11.	ROUGH-SMOOTH	.72	-.34	-.14
12.	HARD-SOFT	.28	-.54	-.42
13.	RUGGED-DELICATE	.59	-.47	-.04
14.	INTENSE-MILD	.34	-.14	.19
15.	MASCULINE-FEMININE	-.09	-.55	-.29
16.	FAST-SLOW	-.60	.08	-.24
17.	ACTIVE-PASSIVE	-.63	.05	-.35
18.	TENSE-RELAXED	.55	.29	-.47
19.	EXCITABLE-CALM	.05	-.44	-.27
20.	COMPLEX-SIMPLE	-.05	-.56	.67

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

Below Average

ELEMENT		LOADINGS		
		COMPONENT	COMPONENT	COMPONENT
		1	2	3
1.	SELF	-.35	-.01	-.43
2.	IDEAL SELF	-.80	.17	-.20
3.	FATHER	-.56	-.46	.12
4.	MOTHER	.04	-.13	.10
5.	FAMILY	.33	-.19	-.37
6.	DISCIPLINE	-.34	.22	.63
7.	POLICE	.90	-.07	.09
8.	LAW	-.42	-.60	.21
9.	PRISON OFFICERS	.49	-.28	.50
10.	AGGRESSION	.97	.21	.10
11.	LOVE	-.39	.14	.53
12.	EXCITEMENT	-.89	.15	.01
13.	GUILTY FEELINGS	-.11	.75	-.18
14.	SEX	.62	.09	-.05
15.	MY OFFENCE	.51	.84	.23
16.	BORSTAL TRAINING	.45	.30	-.01
17.	MY MATES	-.02	-.55	-.19
18.	OTHER PEOPLE	.18	-.33	-.37
19.	WORK	.10	.23	-.73
20.	LIFE OUTSIDE	-.73	.06	-.00

CONSTRUCTS

1.	GOOD-BAD	.55	.35	.46
2.	BEAUTIFUL-UGLY	.60	.53	.13
3.	USEFUL-WORTHLESS	.69	-.39	-.23
4.	KIND-CRUEL	.35	-.83	.17
5.	PLEASANT-UNPLEASANT	.75	-.34	-.17
6.	NICE-AWFUL	.87	-.11	-.17
7.	FAIR-UNFAIR	.65	-.53	.16
8.	CHANGEABLE- UNCHANGABLE	-.11	-.12	.38
9.	POSITIVE-NEGATIVE	.08	.11	-.35
10.	STRONG-WEAK	.48	.64	-.20
11.	ROUGH-SMOOTH	-.71	.09	.41
12.	HARD-SOFT	-.40	.07	.05
13.	RUGGED-DELICATE	-.70	-.24	-.34
14.	INTENSE-MILD	.59	.29	.17
15.	MASCULINE-FEMININE	-.57	.07	-.56
16.	FAST-SLOW	.58	-.03	-.31
17.	ACTIVE-PASSIVE	.03	.20	-.24
18.	TENSE-RELAXED	-.33	-.50	.61
19.	EXCITABLE-CALM	.55	.02	.17
20.	COMPLEX-SIMPLE	-.10	-.46	-.54

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

ELEMENT		LOADINGS		
		COMPONENT	COMPONENT	COMPONENT
		1	2	3
1.	SELF	.46	.02	.39
2.	IDEAL SELF	.46	.35	-.07
3.	FATHER	.68	-.50	.41
4.	MOTHER	.30	.06	-.30
5.	FAMILY	-.17	.29	.15
6.	DISCIPLINE	-.19	-.96	-.58
7.	POLICE	-.46	.26	.45
8.	LAW	-.45	.42	-.21
9.	PRISON OFFICERS	-.26	-.16	-.19
10.	AGGRESSION	-.88	.11	.05
11.	LOVE	.59	.53	-.47
12.	EXCITEMENT	.30	.30	-.09
13.	GUILTY FEELINGS	-.43	-.08	-.03
14.	SEX	.86	-.28	.66
15.	MY OFFENCE	-.99	.37	.48
16.	BORSTAL TRAINING	-.56	-.93	.12
17.	MY MATES	.65	.10	.14
18.	OTHER PEOPLE	-.45	.41	-.30
19.	WORK	-.31	-.24	-.19
20.	LIFE OUTSIDE	.56	-.08	-.43

CONSTRUCTS

1.	GOOD-BAD	-.54	.28	.56
2.	BEAUTIFUL-UGLY	-.64	.26	.37
3.	USEFUL-WORTHLESS	-.57	.30	.37
4.	KIND-CRUEL	-.84	.00	.09
5.	PLEASANT-UNPLEASANT	-.88	-.26	-.12
6.	NICE-AWFUL	-.89	-.01	.06
7.	FAIR-UNFAIR	-.71	.48	.08
8.	CHANGEABLE- UNCHANGABLE	.03	-.63	.07
9.	POSITIVE-NEGATIVE	.56	.29	-.17
10.	STRONG-WEAK	-.26	-.05	-.15
11.	ROUGH-SMOOTH	.58	.16	.39
12.	HARD-SOFT	.63	.56	.15
13.	RUGGED-DELICATE	.08	.70	.43
14.	INTENSE-MILD	.52	-.01	.44
15.	MASCULINE-FEMININE	.17	.60	-.07
16.	FAST-SLOW	-.29	.62	-.39
17.	ACTIVE-PASSIVE	-.08	.69	-.21
18.	TENSE-RELAXED	.25	.29	.54
19.	EXCITABLE-CALM	-.58	-.23	.25
20.	COMPLEX-SIMPLE	.34	-.39	.54

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

<u>ELEMENT</u>		<u>LOADINGS</u>		
		<u>COMPONENT</u>	<u>COMPONENT</u>	<u>COMPONENT</u>
		1	2	3
1.	SELF	-.49	.21	.53
2.	IDEAL SELF	-.15	.13	-.32
3.	FATHER	.57	-.25	.05
4.	MOTHER	-.66	-.36	-.17
5.	FAMILY	.06	-.25	-.12
6.	DISCIPLINE	1.01	-.83	-.31
7.	POLICE	-.23	-.04	.57
8.	LAW	.68	.00	.40
9.	PRISON OFFICERS	.22	.32	.51
10.	AGGRESSION	-.83	-.50	.17
11.	LOVE	.45	.17	-.24
12.	EXCITEMENT	-.55	.32	-.27
13.	GUILTY FEELINGS	-.43	.24	.10
14.	SEX	.05	.47	-.38
15.	MY OFFENCE	-1.07	.13	-.35
16.	BORSTAL TRAINING	-.41	-.69	.14
17.	MY MATES	.10	.26	-.19
18.	OTHER PEOPLE	.91	.22	.00
19.	WORK	.46	.30	.17
20.	LIFE OUTSIDE	.29	.10	-.29

CONSTRUCTS

1.	GOOD-BAD	-.72	.03	.46
2.	BEAUTIFUL-UGLY	-.79	-.19	.14
3.	USEFUL-WORTHLESS	-.50	.45	.18
4.	KIND-CRUEL	-.80	-.18	.21
5.	PLEASANT-UNPLEASANT	-.76	-.08	.15
6.	NICE-AWFUL	-.76	-.35	-.15
7.	FAIR-UNFAIR	-.80	-.10	-.01
8.	CHANGEABLE- UNCHANGEABLE	.53	-.15	.27
9.	POSITIVE-NEGATIVE	-.46	.32	.12
10.	STRONG-WEAK	-.37	.62	.49
11.	ROUGH-SMOOTH	.34	.06	.11
12.	HARD-SOFT	.36	.75	.26
13.	RUGGED-DELICATE	.04	.46	-.49
14.	INTENSE-MILD	.63	.07	-.01
15.	MASCULINE-FEMININE	.03	.65	-.28
16.	FAST-SLOW	-.53	.48	-.12
17.	ACTIVE-PASSIVE	-.16	.32	-.21
18.	TENSE-RELAXED	.76	-.16	.30
19.	EXCITABLE-CALM	.62	.06	.23
20.	COMPLEX-SIMPLE	.30	-.02	.77

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

<u>ELEMENT</u>		<u>LOADINGS</u>		
		<u>COMPONENT</u>	<u>COMPONENT</u>	<u>COMPONENT</u>
		1	2	3
1.	SELF	-.12	.58	-.29
2.	IDEAL SELF	-.16	.71	.47
3.	FATHER	.17	-.04	-.05
4.	MOTHER	.24	.47	.42
5.	FAMILY	.10	-.22	.77
6.	DISCIPLINE	.28	-.97	.16
7.	POLICE	-.19	-.36	-.14
8.	LAW	.11	-.04	-.32
9.	PRISON OFFICERS	.69	.16	.08
10.	AGGRESSION	-.88	.24	-.21
11.	LOVE	.76	-.36	-.32
12.	EXCITEMENT	.33	-.25	-.09
13.	GUILTY FEELINGS	-.21	.20	-.04
14.	SEX	-.09	-.16	.75
15.	MY OFFENCE	-.04	.37	.04
16.	BORSTAL TRAINING	-1.23	-.33	-.27
17.	MY MATES	.37	.54	-.36
18.	OTHER PEOPLE	-.58	-.51	-.00
19.	WORK	-.37	.05	-.18
20.	LIFE OUTSIDE	.84	-.06	-.40

CONSTRUCTS

1.	GOOD-BAD	-.39	.53	.23
2.	BEAUTIFUL-UGLY	-.83	.26	.12
3.	USEFUL-WORTHLESS	-.37	.71	.01
4.	KIND-CRUEL	-.54	-.48	.18
5.	PLEASANT-UNPLEASANT	-.78	-.02	-.00
6.	NICE-AWFUL	-.78	-.00	.39
7.	FAIR-UNFAIR	-.77	.18	-.46
8.	CHANGEABLE- UNCHANGEABLE	.63	.17	.11
9.	POSITIVE-NEGATIVE	-.42	-.15	-.06
10.	STRONG-WEAK	-.08	.75	.00
11.	ROUGH-SMOOTH	.42	.58	-.16
12.	HARD-SOFT	.69	.46	-.22
13.	RUGGED-DELICATE	.26	.59	.33
14.	INTENSE-MILD	.26	-.30	.71
15.	MASCULINE-FEMININE	.12	.09	.83
16.	FAST-SLOW	-.44	.32	-.00
17.	ACTIVE-PASSIVE	.18	.45	.58
18.	TENSE-RELAXED	.52	.00	-.33
19.	EXCITABLE-CALM	.29	-.23	.00
20.	COMPLEX-SIMPLE	.18	-.51	.28

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

ELEMENT	LOADINGS		
	COMPONENT 1	COMPONENT 2	COMPONENT 3
1. SELF	-.71	.30	-.06
2. IDEAL SELF	-.36	.21	-.11
3. FATHER	-.25	.33	-.18
4. MOTHER	.59	.10	.34
5. FAMILY	.26	.84	.28
6. DISCIPLINE	.41	.37	.46
7. POLICE	-1.43	-.06	-.10
8. LAW	.17	.31	-.31
9. PRISON OFFICERS	.33	-.33	-.31
10. AGGRESSION	-.37	-.68	.75
11. LOVE	.62	.02	-.02
12. EXCITEMENT	.87	.16	-.16
13. GUILTY FEELINGS	-.34	-.29	-.60
14. SEX	.25	-.03	.05
15. MY OFFENCE	-.06	-.59	.19
16. BORSTAL TRAINING	.15	-.02	-.39
17. MY MATES	-.82	.30	.03
18. OTHER PEOPLE	.66	-.66	-.33
19. WORK	.18	-.00	.04
20. LIFE OUTSIDE	-.16	-.26	.43

CONSTRUCTS

1. GOOD-BAD	-.80	-.30	.24
2. BEAUTIFUL-UGLY	-.84	.05	.33
3. USEFUL-WORTHLESS	-.79	-.32	.10
4. KIND-CRUEL	-.90	.13	.05
5. PLEASANT-UNPLEASANT	-.87	.22	.26
6. NICE-AWFUL	-.75	-.28	-.22
7. FAIR-UNFAIR	-.70	.11	.11
8. CHANGEABLE- UNCHANGEABLE	-.56	-.15	-.49
9. POSITIVE-NEGATIVE	-.09	.01	-.31
10. STRONG-WEAK	.16	.00	-.89
11. ROUGH-SMOOTH	.39	.38	.32
12. HARD-SOFT	.00	.74	-.03
13. RUGGED-DELICATE	.48	.00	.33
14. INTENSE-MILD	.02	.59	.20
15. MASCULINE-FEMININE	.61	-.45	-.17
16. FAST-SLOW	-.50	-.03	-.40
17. ACTIVE-PASSIVE	-.21	.46	-.18
18. TENSE-RELAXED	.11	.54	.02
19. EXCITABLE-CALM	-.07	.60	-.28
20. COMPLEX-SIMPLE	-.36	.57	-.34

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

ELEMENT	LOADINGS		
	COMPONENT 1	COMPONENT 2	COMPONENT 3
1. SELF	-.30	-.25	-.52
2. IDEAL SELF	-.31	-.03	-.13
3. FATHER	-.17	-.83	-.16
4. MOTHER	-.16	.26	-.24
5. FAMILY	-.20	-.20	-.17
6. DISCIPLINE	.03	-.21	-.11
7. POLICE	-.13	-.53	.34
8. LAW	.00	.15	.12
9. PRISON OFFICERS	.91	.54	-.12
10. AGGRESSION	1.11	.06	.22
11. LOVE	-.84	1.13	-.18
12. EXCITEMENT	-.48	-.17	.23
13. GUILTY FEELINGS	.59	-.21	-.03
14. SEX	-.51	.05	-.16
15. MY OFFENCE	.45	.15	-.39
16. BORSTAL TRAINING	-.02	-.12	.05
17. MY MATES	.59	.21	-.14
18. OTHER PEOPLE	-.10	.27	1.17
19. WORK	-.75	-.05	.19
20. LIFE OUTSIDE	.32	-.20	.04

CONSTRUCTS

1. GOOD-BAD	.75	.02	-.46
2. BEAUTIFUL-UGLY	.38	-.32	-.23
3. USEFUL-WORTHLESS	.71	.08	-.19
4. KIND-CRUEL	.65	.26	.08
5. PLEASANT-UNPLEASANT	.91	.05	.01
6. NICE-AWFUL	.77	-.11	.05
7. FAIR-UNFAIR	.73	.10	.36
8. CHANGEABLE- UNCHANGEABLE	.08	.16	-.74
9. POSITIVE-NEGATIVE	.34	.49	.24
10. STRONG-WEAK	.67	.02	-.17
11. ROUGH-SMOOTH	-.57	-.08	-.36
12. HARD-SOFT	-.09	.56	-.57
13. RUGGED-DELICATE	-.05	.64	.00
14. INTENSE-MILD	.17	-.25	-.82
15. MASCULINE-FEMININE	.21	.78	.09
16. FAST-SLOW	.42	.11	.26
17. ACTIVE-PASSIVE	.57	-.47	.02
18. TENSE-RELAXED	-.30	.53	-.08
19. EXCITABLE-CALM	.04	.17	-.01
20. COMPLEX-SIMPLE	-.09	.80	-.07

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

Below
Average

ELEMENT	LOADINGS		
	COMPONENT 1	COMPONENT 2	COMPONENT 3
1. SELF	.11	-.25	.47
2. IDEAL SELF	-.53	-.12	-.07
3. FATHER	-.02	.42	-.08
4. MOTHER	-.20	.90	.25
5. FAMILY	-.36	.31	.09
6. DISCIPLINE	-.08	-.65	.21
7. POLICE	.72	.01	-.15
8. LAW	.19	-.65	.30
9. PRISON OFFICERS	.25	.33	-.22
10. AGGRESSION	.05	.32	-.01
11. LOVE	-.26	.12	-.55
12. EXCITEMENT	-.92	.26	-.17
13. GUILTY FEELINGS	.15	-.46	.56
14. SEX	.14	-.45	-.65
15. MY OFFENCE	-.16	-.26	-.06
16. BORSTAL TRAINING	1.37	.45	.30
17. MY MATES	.26	-.39	-.73
18. OTHER PEOPLE	.18	.24	-.23
19. WORK	-.35	.25	.27
20. LIFE OUTSIDE	-.53	-.16	.49

CONSTRUCTS

1. GOOD-BAD	-.64	.15	.15
2. BEAUTIFUL-UGLY	-.54	-.08	.22
3. USEFUL-WORTHLESS	-.40	.34	.05
4. KIND-CRUEL	-.54	-.45	-.27
5. PLEASANT-UNPLEASANT	-.80	-.23	.24
6. NICE-AWFUL	-.83	.27	.07
7. FAIR-UNFAIR	-.16	-.22	-.65
8. CHANGEABLE- UNCHANGEABLE	-.25	-.24	.72
9. POSITIVE-NEGATIVE	.30	-.18	-.22
10. STRONG-WEAK	-.71	.12	-.38
11. ROUGH-SMOOTH	.38	.74	-.09
12. HARD-SOFT	-.04	.57	.42
13. RUGGED-DELICATE	-.24	.80	.00
14. INTENSE-MILD	.27	.16	-.39
15. MASCULINE-FEMININE	.65	.01	.54
16. FAST-SLOW	-.61	.21	-.13
17. ACTIVE-PASSIVE	-.33	.68	.18
18. TENSE-RELAXED	.22	.63	-.02
19. EXCITABLE-CALM	-.19	.64	-.52
20. COMPLEX-SIMPLE	-.15	.01	.52

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

<u>ELEMENT</u>		<u>LOADINGS</u>		
		<u>COMPONENT</u>	<u>COMPONENT</u>	<u>COMPONENT</u>
		1	2	3
1.	SELF	-.54	.63	.28
2.	IDEAL SELF	.11	.36	-.13
3.	FATHER	-.08	.09	.03
4.	MOTHER	.24	-.14	.87
5.	FAMILY	-.67	-.57	.31
6.	DISCIPLINE	.20	-.58	-.57
7.	POLICE	1.43	.12	-.02
8.	LAW	1.08	-.06	.45
9.	PRISON OFFICERS	-.03	-.41	-.05
10.	AGGRESSION	-.58	-.20	-.06
11.	LOVE	-.38	.45	-.51
12.	EXCITEMENT	-.36	.49	.32
13.	GUILTY FEELINGS	.21	-.20	-.56
14.	SEX	-.34	.28	.09
15.	MY OFFENCE	.38	-.29	.06
16.	BORSTAL TRAINING	.39	.68	-.47
17.	MY MATES	-.08	-.04	.07
18.	OTHER PEOPLE	-.38	-.40	-.15
19.	WORK	-.24	-.44	-.05
20.	LIFE OUTSIDE	-.34	.24	.09

CONSTRUCTS

1.	GOOD-BAD	-.76	.04	-.01
2.	BEAUTIFUL-UGLY	-.67	-.09	-.05
3.	USEFUL-WORTHLESS	-.73	-.18	-.32
4.	KIND-CRUEL	-.65	.20	-.28
5.	PLEASANT-UNPLEASANT	-.66	-.48	-.01
6.	NICE-AWFUL	-.22	-.74	-.29
7.	FAIR-UNFAIR	-.69	-.09	-.40
8.	CHANGEABLE- UNCHANGEABLE	.26	.16	-.73
9.	POSITIVE-NEGATIVE	-.36	.24	.19
10.	STRONG-WEAK	-.68	.04	-.27
11.	ROUGH-SMOOTH	.08	-.70	.22
12.	HARD-SOFT	-.14	-.36	.17
13.	RUGGED-DELICATE	.30	-.30	-.49
14.	INTENSE-MILD	.59	-.44	.18
15.	MASCULINE-FEMININE	-.32	-.61	.44
16.	FAST-SLOW	-.38	-.25	.03
17.	ACTIVE-PASSIVE	-.50	-.41	-.15
18.	TENSE-RELAXED	.61	-.49	-.37
19.	EXCITABLE-CALM	.57	-.50	-.22
20.	COMPLEX-SIMPLE	.39	.14	-.78

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

<u>ELEMENT</u>		<u>LOADINGS</u>		
		<u>COMPONENT</u>	<u>COMPONENT</u>	<u>COMPONENT</u>
		1	2	3
1.	SELF	.17	.13	-.86
2.	IDEAL SELF	.58	-.26	-.60
3.	FATHER	-.38	.73	.14
4.	MOTHER	-.28	.19	.07
5.	FAMILY	-.75	-.13	.06
6.	DISCIPLINE	-.28	.41	.13
7.	POLICE	.06	.21	.25
8.	LAW	1.41	.50	.38
9.	PRISON OFFICERS	-.23	.55	-.28
10.	AGGRESSION	.19	-.15	-.15
11.	LOVE	-.23	.29	.07
12.	EXCITEMENT	-.29	.19	.12
13.	GUILTY FEELINGS	-.02	.16	.01
14.	SEX	-.17	.00	-.03
15.	MY OFFENCE	.69	-.68	.43
16.	BORSTAL TRAINING	-1.17	-.70	.12
17.	MY MATES	.24	-.62	-.68
18.	OTHER PEOPLE	.03	.13	-.03
19.	WORK	.00	-.59	.48
20.	LIFE OUTSIDE	.41	-.38	.33

CONSTRUCTS

1.	GOOD-BAD	.80	.14	-.42
2.	BEAUTIFUL-UGLY	.65	.03	.31
3.	USEFUL-WORTHLESS	.65	.40	-.34
4.	KIND-CRUEL	.71	-.38	-.05
5.	PLEASANT-UNPLEASANT	.76	-.18	-.08
6.	NICE-AWFUL	.53	-.50	.24
7.	FAIR-UNFAIR	.57	-.09	-.48
8.	CHANGEABLE- UNCHANGEABLE	.22	.42	.24
9.	POSITIVE-NEGATIVE	.52	.09	.45
10.	STRONG-WEAK	.75	.32	.19
11.	ROUGH-SMOOTH	-.59	.61	.16
12.	HARD-SOFT	.31	.78	.10
13.	RUGGED-DELICATE	-.54	.40	.32
14.	INTENSE-MILD	-.46	.39	-.53
15.	MASCULINE-FEMININE	.05	.01	.68
16.	FAST-SLOW	.43	.84	.08
17.	ACTIVE-PASSIVE	-.13	.57	.00
18.	TENSE-RELAXED	.24	.36	-.04
19.	EXCITABLE-CALM	-.07	.21	.76
20.	COMPLEX-SIMPLE	.51	.19	.08

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

<u>ELEMENT</u>		<u>LOADINGS</u>		
		<u>COMPONENT</u>	<u>COMPONENT</u>	<u>COMPONENT</u>
		1	2	3
1.	SELF	.60	-.40	.05
2.	IDEAL SELF	-.33	-.28	.45
3.	FATHER	.25	-.21	.35
4.	MOTHER	.76	-.65	.00
5.	FAMILY	.75	.25	.36
6.	DISCIPLINE	-.16	.21	-.08
7.	POLICE	-.63	.39	-.24
8.	LAW	-.73	-.23	-.50
9.	PRISON OFFICERS	-.58	-.08	.43
10.	AGGRESSION	.16	.12	-.13
11.	LOVE	-.14	.13	.00
12.	EXCITEMENT	-.78	-.29	.34
13.	GUILTY FEELINGS	-.35	-.06	-.05
14.	SEX	.28	.58	-.05
15.	MY OFFENCE	-.52	-.22	-.81
16.	BORSTAL TRAINING	.44	.79	.00
17.	MY MATES	.77	.03	-.65
18.	OTHER PEOPLE	.11	-.08	-.01
19.	WORK	-.38	.36	.49
20.	LIFE OUTSIDE	.49	-.12	.05

CONSTRUCTS

1.	GOOD-BAD	.83	.31	-.10
2.	BEAUTIFUL-UGLY	.79	.22	.25
3.	USEFUL-WORTHLESS	.67	-.28	.06
4.	KIND-CRUEL	.75	-.24	-.18
5.	PLEASANT-UNPLEASANT	.20	.63	.20
6.	NICE-AWFUL	.80	.40	.02
7.	FAIR-UNFAIR	.70	-.24	.53
8.	CHANGEABLE- UNCHANGEABLE	.21	-.11	.04
9.	POSITIVE-NEGATIVE	-.38	-.50	-.60
10.	STRONG-WEAK	.60	-.49	-.25
11.	ROUGH-SMOOTH	-.60	-.33	-.23
12.	HARD-SOFT	.29	-.36	-.35
13.	RUGGED-DELICATE	.27	-.54	-.28
14.	INTENSE-MILD	-.40	.16	-.80
15.	MASCULINE-FEMININE	.14	-.34	.20
16.	FAST-SLOW	.54	-.37	.30
17.	ACTIVE-PASSIVE	.25	.15	-.48
18.	TENSE-RELAXED	-.37	-.47	.19
19.	EXCITABLE-CALM	-.16	.26	-.14
20.	COMPLEX-SIMPLE	.11	-.13	-.49

ELEMENT AND CONSTRUCT LOADINGS ON THE THREE COMPONENTS

CONSTRUCTS

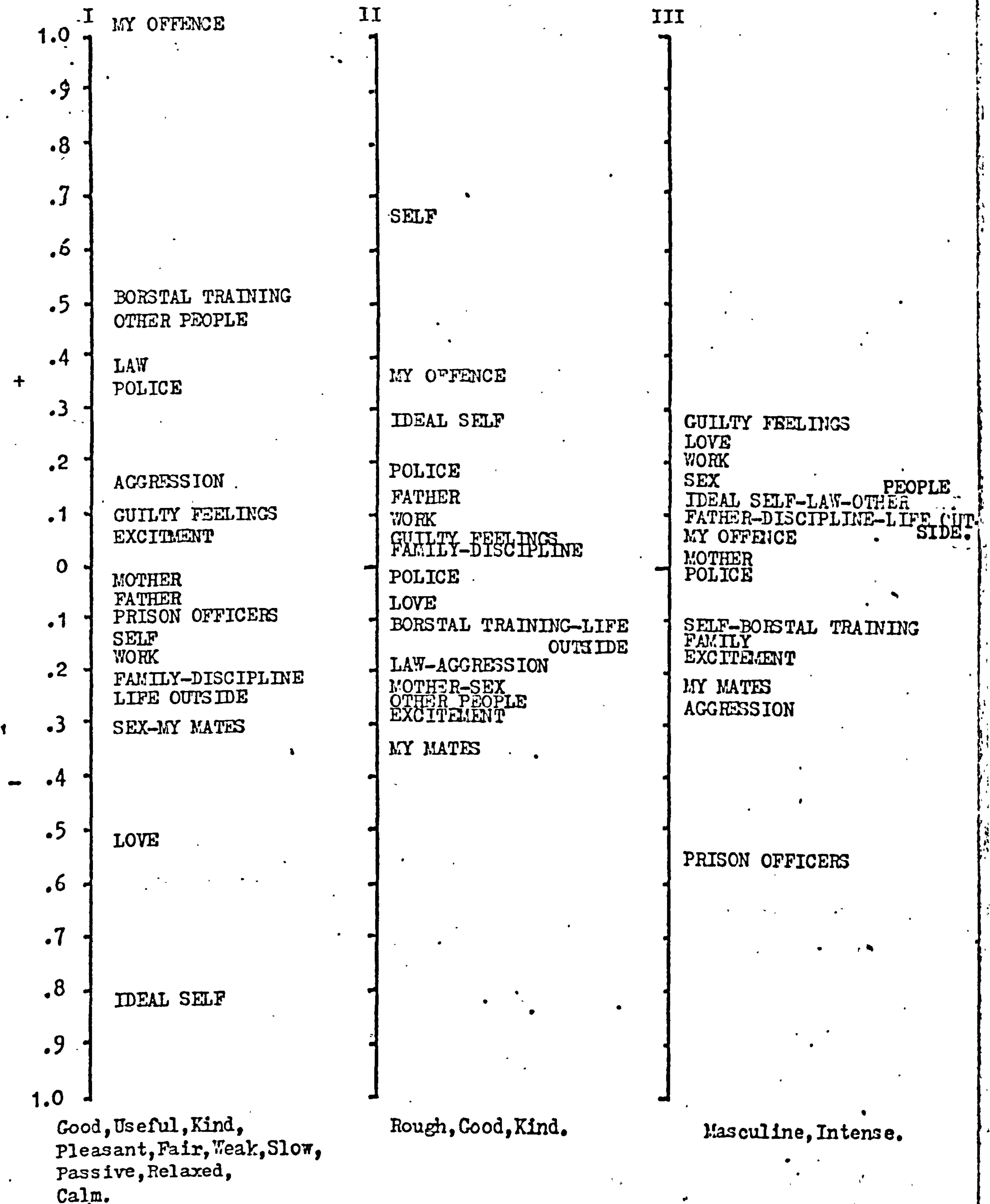
Bad, Worthless, Cruel,
Unpleasant, Unfair, Weak,
Fast, Active, Tense,
Excitable.

CONSTRUCTS

Smooth
(Bad, Cruel).

CONSTRUCTS

Feminine, Mild



CONSTRUCTS

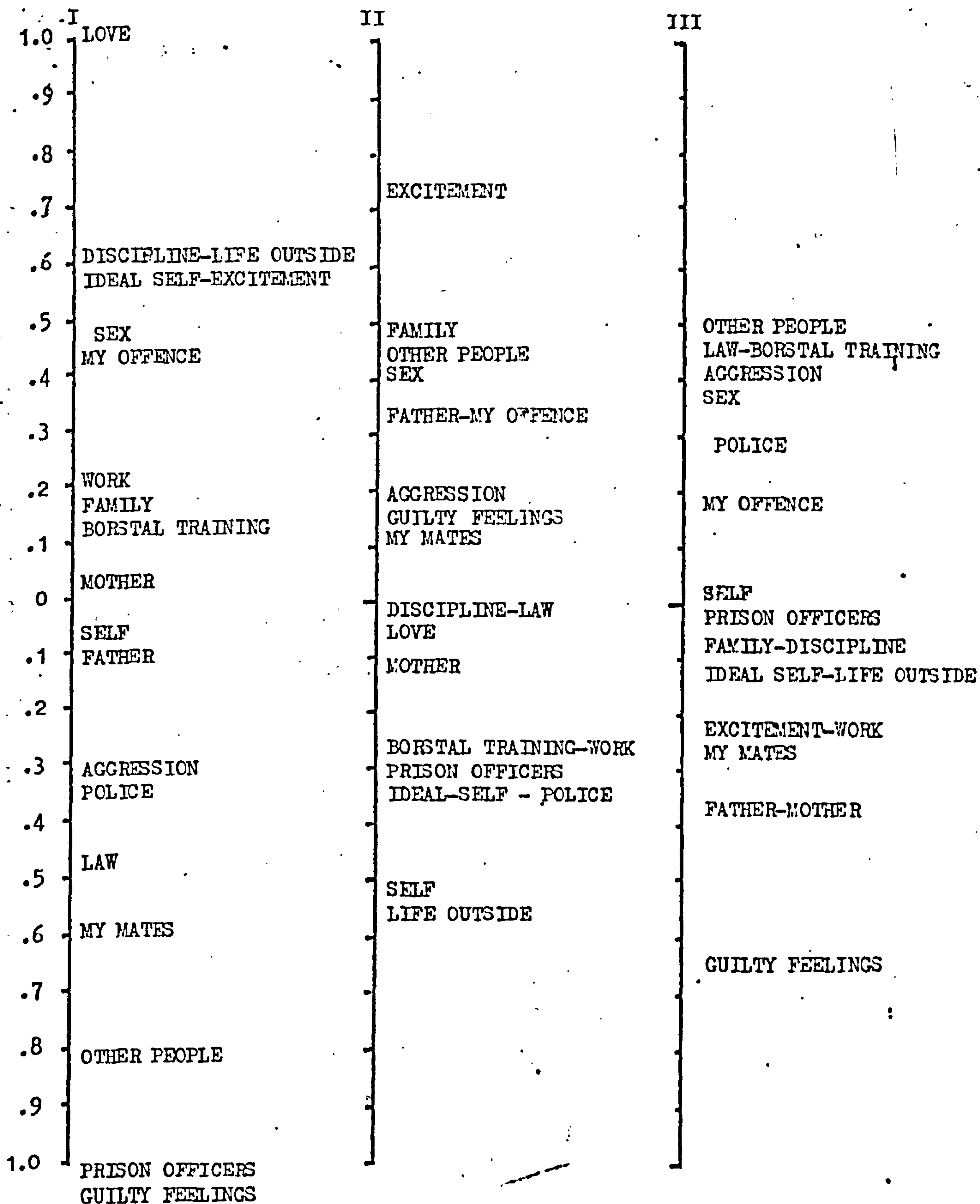
Good, Useful, Pleasant, Kind,
Nice, Fair, Unchangeable,
Strong, Smooth, Delicate,
Fast, Active, Relaxed.

CONSTRUCTS

Beautiful, Hard,
Masculine, Intense,
(Unchangeable, Strong,
Rugged, Complex).

CONSTRUCTS

Negative, Simple
(Tense, Hard).



Bad, Worthless, Unpleasant,
Cruel, Awful, Unfair, Changeable,
Weak, Rough, Rugged, Slow,
Passive, Tense.

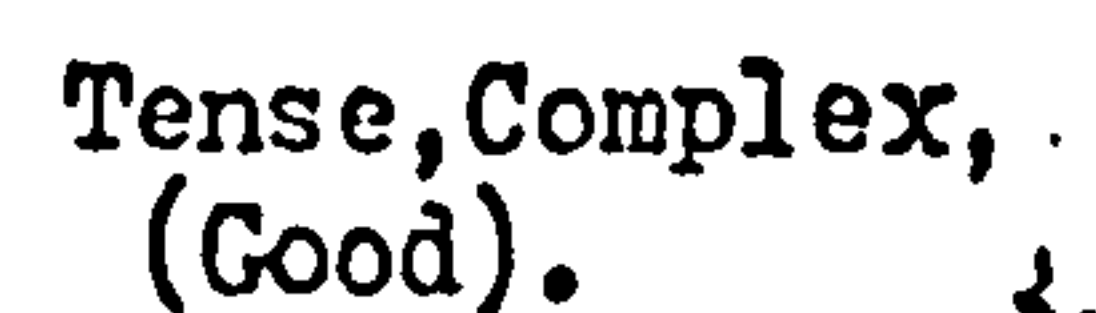
Ugly, Soft, Feminine,
Calm
(Changeable, Weak,
Delicate, Simple).

Positive, Complex,
(Relaxed, Soft).

ELEMENT DISPERSION: LOADINGS ON THREE COMPONENTS WITH CONSTRUCTS

CONSTRUCTS

Relaxed, Simple
(Rad)

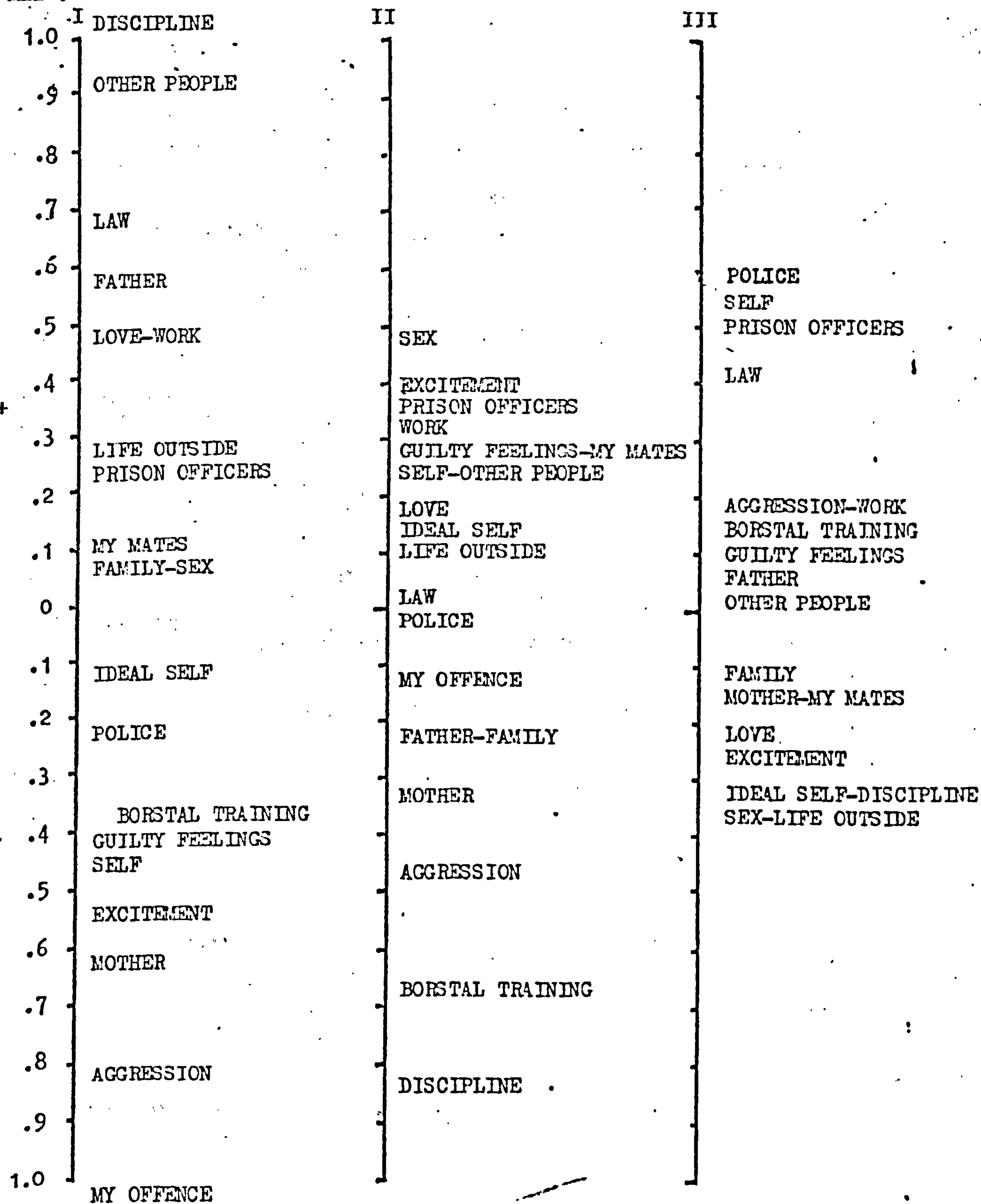


ELEMENT DISPERSION: LOADINGS ON THREE COMPONENTS WITH CONSTRUCTS

CONSTRUCTS
Good, Beautiful, Useful, Kind,
Pleasant, Nice, Fair,
Unchangeable, Positive,
Fast, Relaxed, Calm, Smooth,
Mild.

CONSTRUCTS
Weak, Soft, Slow,
Delicate, Feminine, Passive,
(Worthless)

CONSTRUCTS
Bad, Weak, Rugged,
Simple



Bad, Ugly, Worthless, Cruel,
Unpleasant, Awful, Unfair,
Changeable, Negative, Slow,
Tense, Excitable, Rough, Intense.

Strong, Hard, Rugged,
Fast, Masculine, Active,
(Useful).

Good, Strong,
Delicate, Complex.

CONSTRUCTS

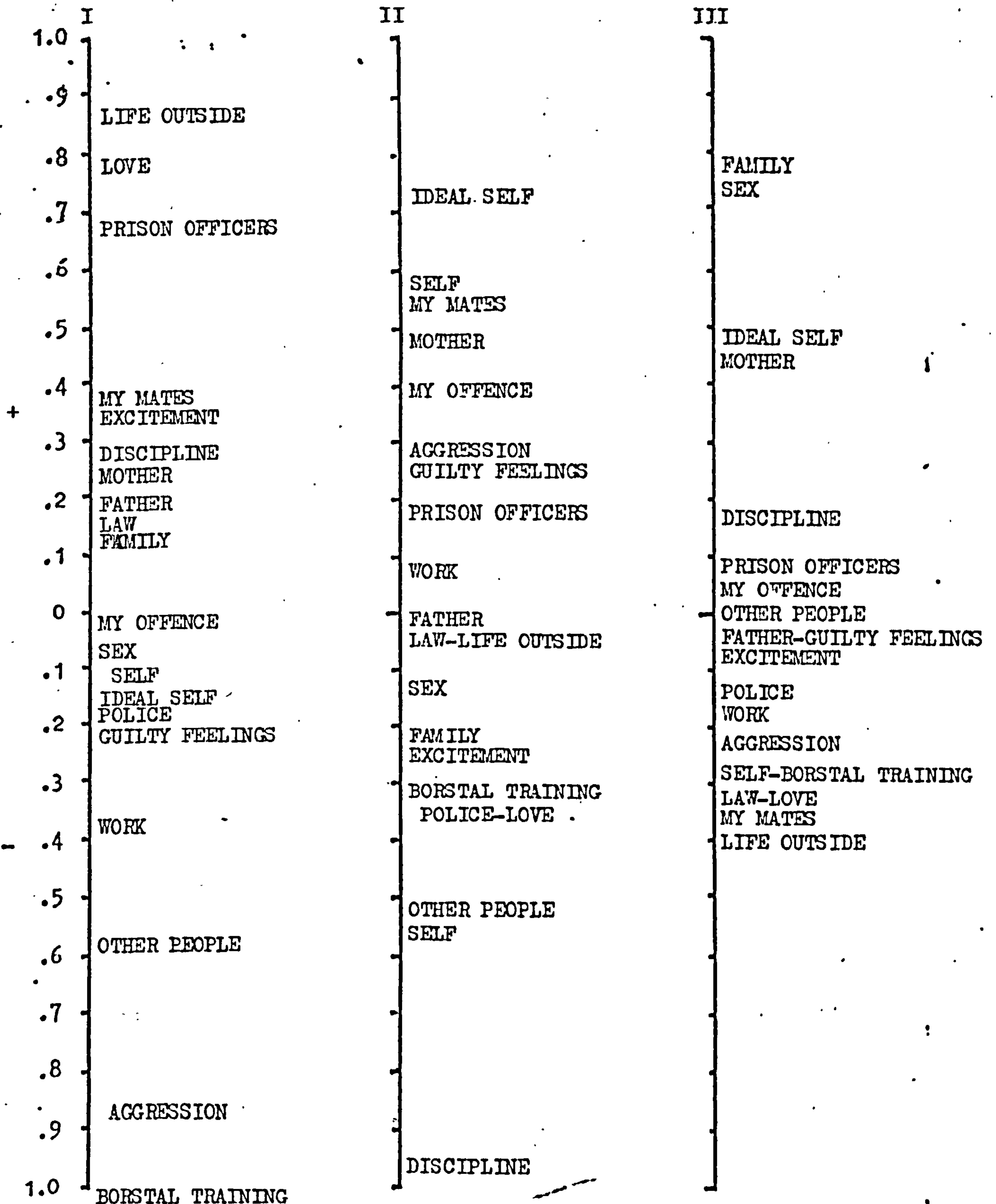
Beautiful, Kind, Pleasant,
Nice, Fair, Unchangeable,
Positive, Smooth, Soft,
Calm, Fast

CONSTRUCTS

Bad, Worthless, Weak, Soft,
Delicate, Smooth, Complex,
(Passive).

CONSTRUCTS

Feminine, Slow, Passive,
Unfair, Mild.



Ugly, Cruel, Unpleasant, Awful,
Fair, Changeable, Negative,
Rough, Hard, Excitable, Slow.

Good, Useful, Strong,
Hard, Rugged, Smooth, Simple,
(Active).

Masculine, Fast, Active,
Fair, Intense.

CONSTRUCTS

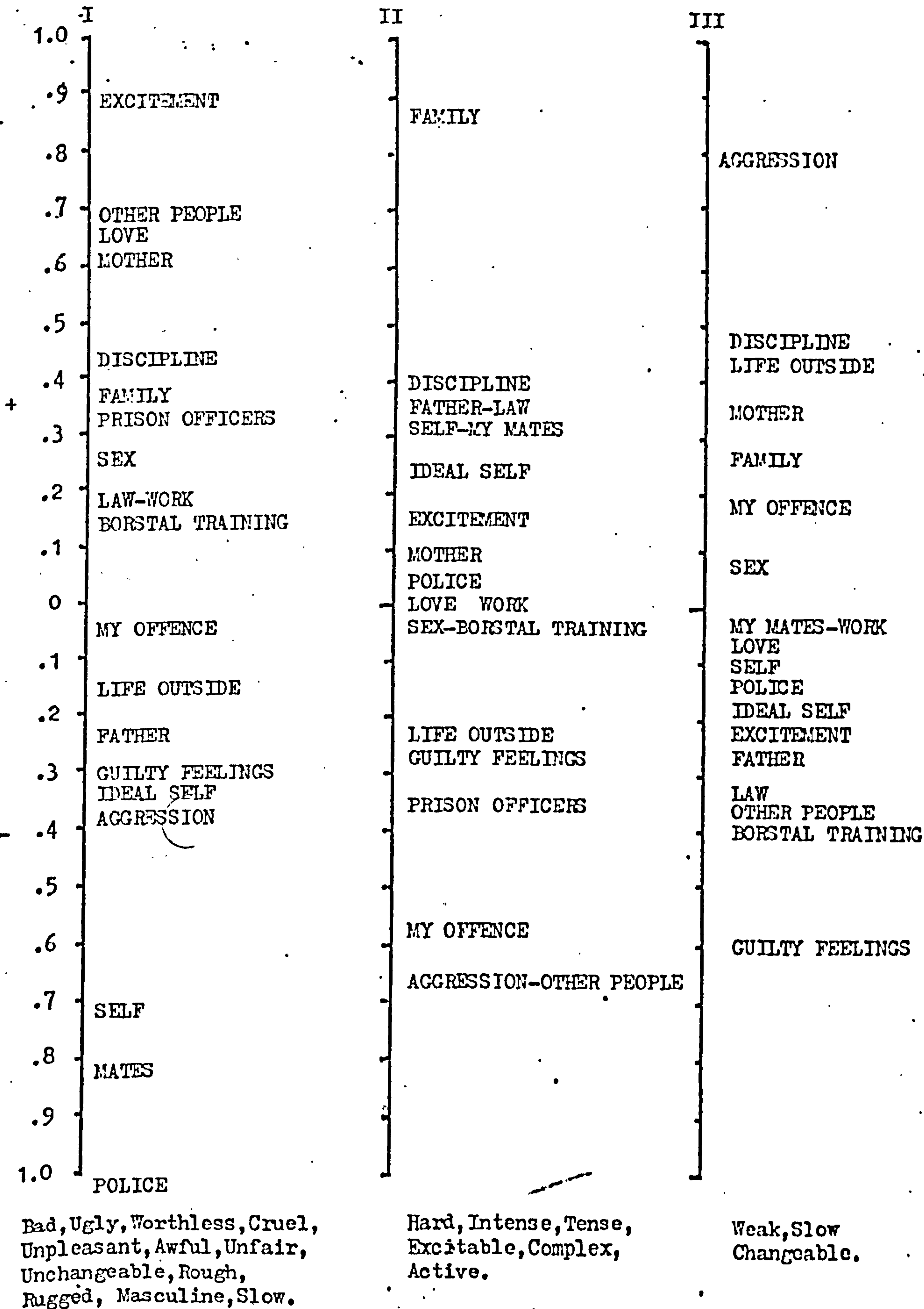
Good, Beautiful, Useful,
Kind, Pleasant, Nice, Fair,
Changeable, Smooth,
Delicate, Feminine, Fast.

CONSTRUCTS

Soft, Mild, Relaxed,
Calm, Simple, Passive.

CONSTRUCTS

Strong, Fast,
Unchangeable.



CONSTRUCTS

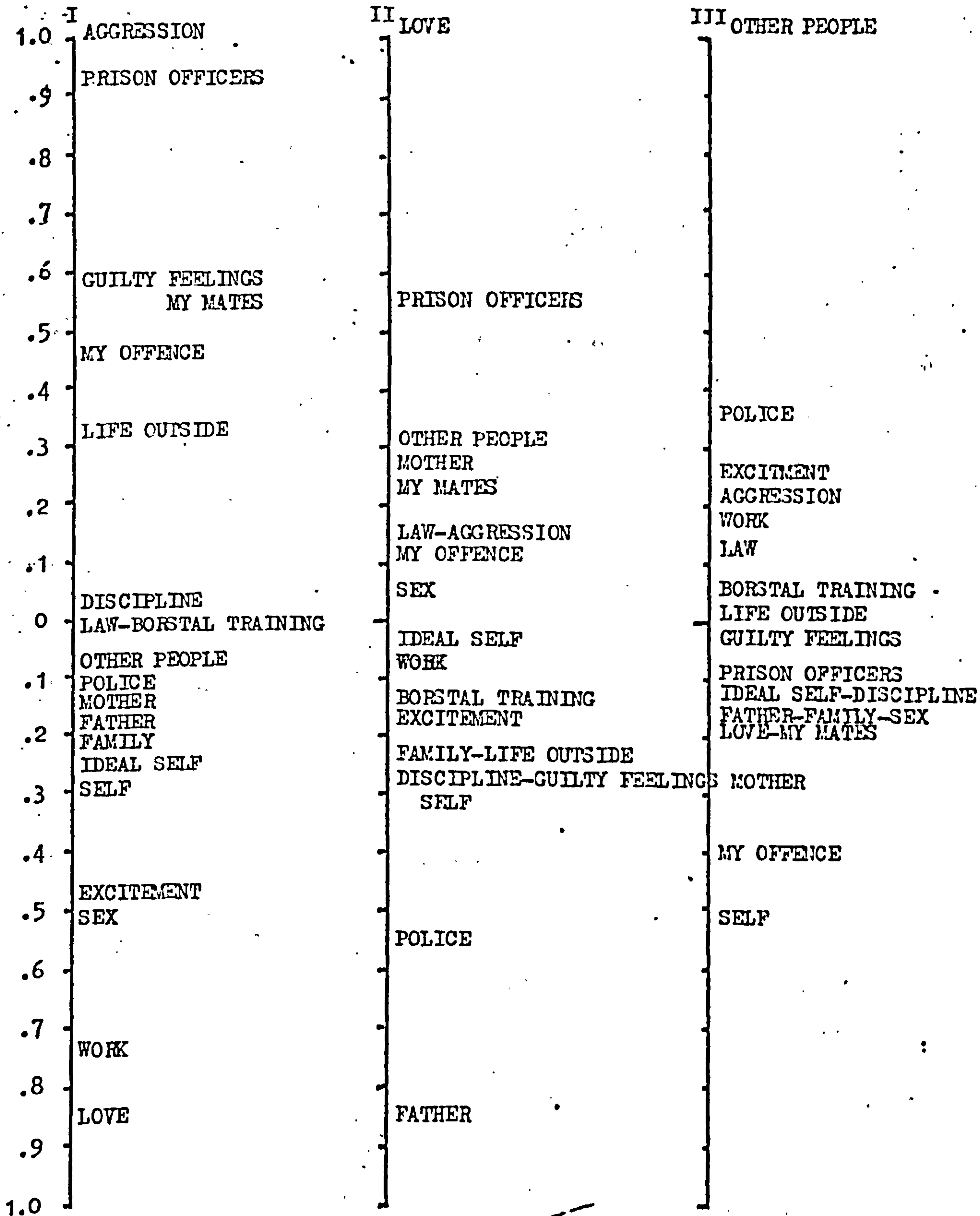
Bad, Ugly, Worthless, Cruel,
Unpleasant, Awful, Weak,
Unfair, Rough, Slow,
Passive.

CONSTRUCTS

Negative, Soft, Delicate,
Feminine, Relaxed,
Active, Simple.

CONSTRUCTS

Changeable, Hard,
Intense.



Good, Beautiful, Useful, Kind,
Pleasant, Nice, Fair, Strong,
Smooth, Fast, Active.

Positive, Hard, Rugged,
Masculine, Tense, Passive,
Complex.

Unchangeable,
Soft, Mild.

CONSTRUCTS

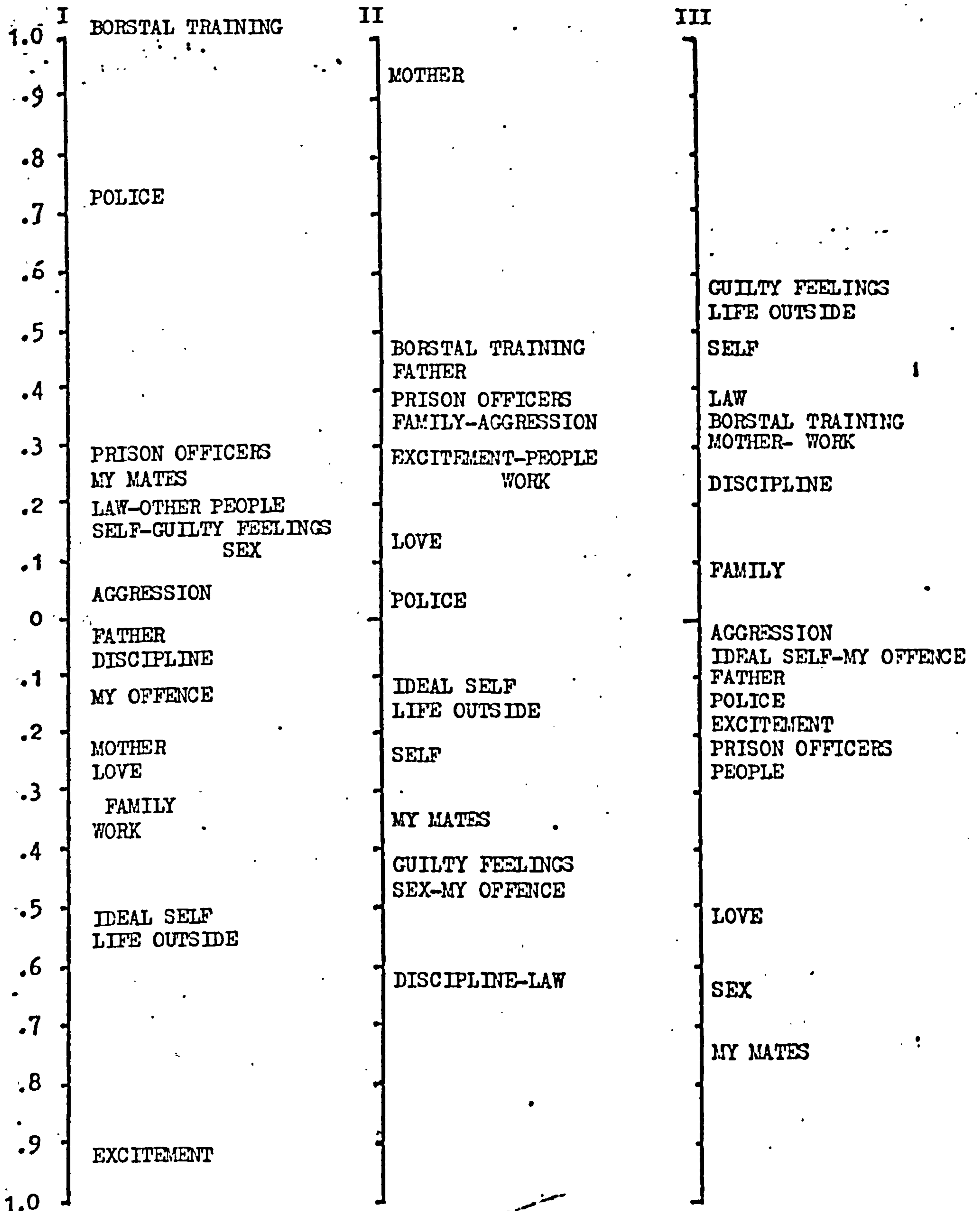
Good, Beautiful, Useful, Kind,
Pleasant, Nice, Negative,
Strong, Feminine, Fast,
(Smooth, Active).

CONSTRUCTS

Smooth, Soft, Delicate,
Passive, Relaxed, Calm,
(Cruel, Worthless).

CONSTRUCTS

Fair, Unchangeable,
Intense, Excitable, Simple
(Strong, Soft, Feminine).



Bad, Ugly, Worthless, Cruel,
Unpleasant, Awful, Positive,
Weak, Masculine, Slow
(Rough, Passive).

Rough, Hard, Rugged,
Active, Tense,
Excitable,
(Kind, Useful).

Unfair, Changeable,
Mild, Calm, Complex,
(Weak, Hard, Masculine).

CONSTRUCTS

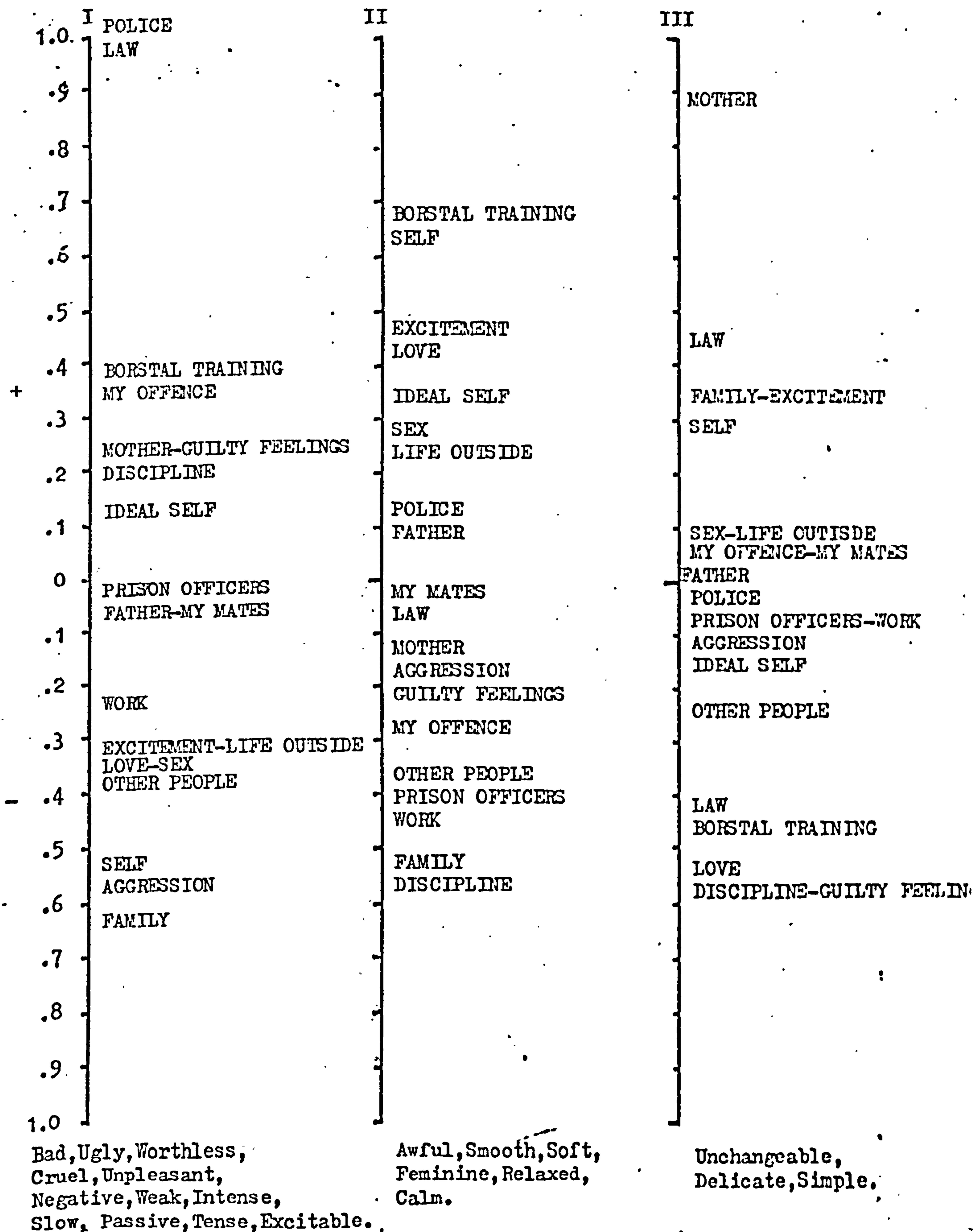
Good, Beautiful, Useful,
Kind, Pleasant, Positive,
Strong, Mild, Fast, Active,
Relaxed, Calm.

CONSTRUCTS

Nice, Rough, Hard, Masculine,
Tense, Excitable.

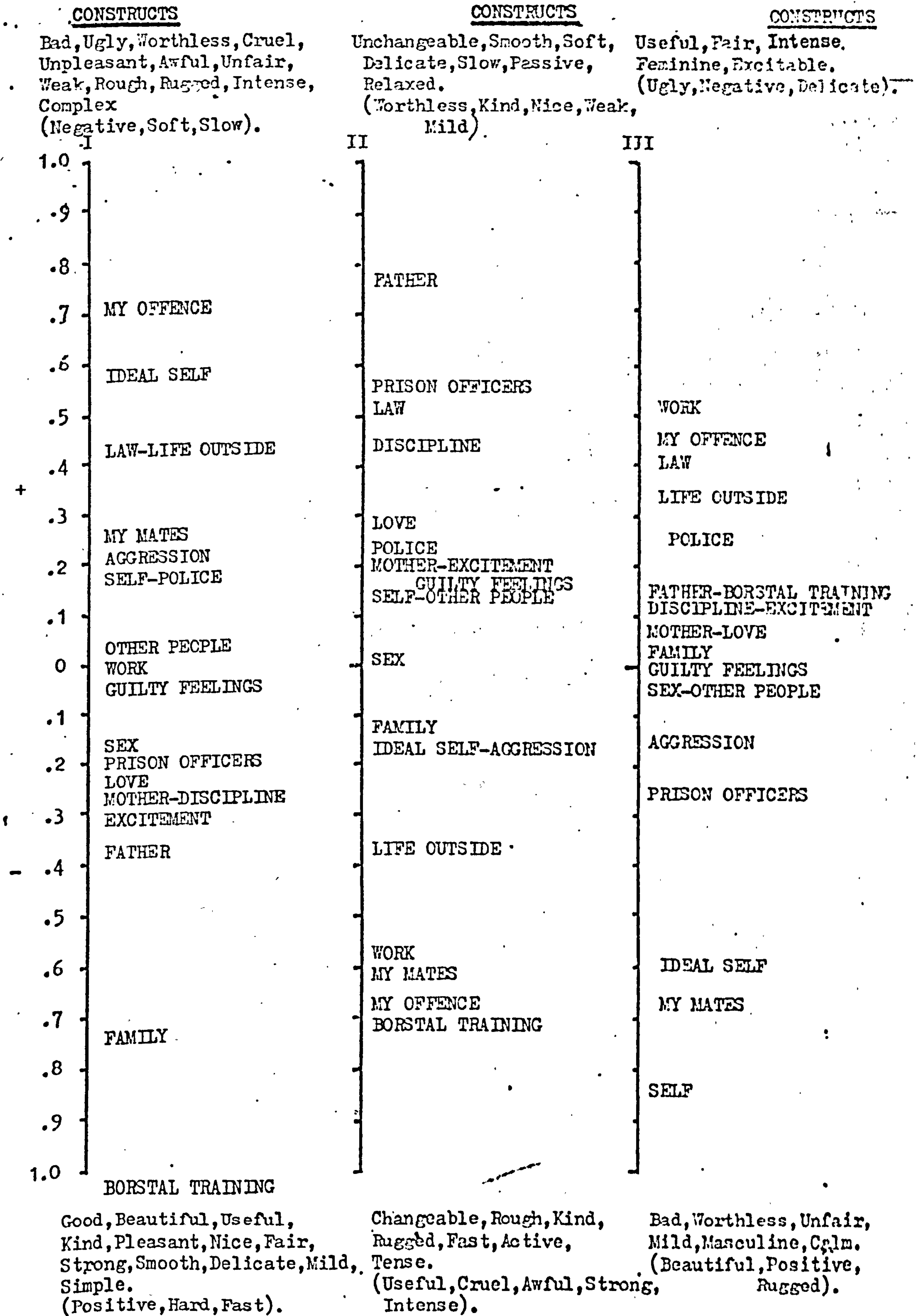
CONSTRUCTS

Changeable, Rugged,
Complex.



ELEMENT DISPERSION: LOADINGS ON THREE COMPONENTS WITH CONSTRUCTS

APPENDIX D. (c) 4.2



CONSTRUCTS

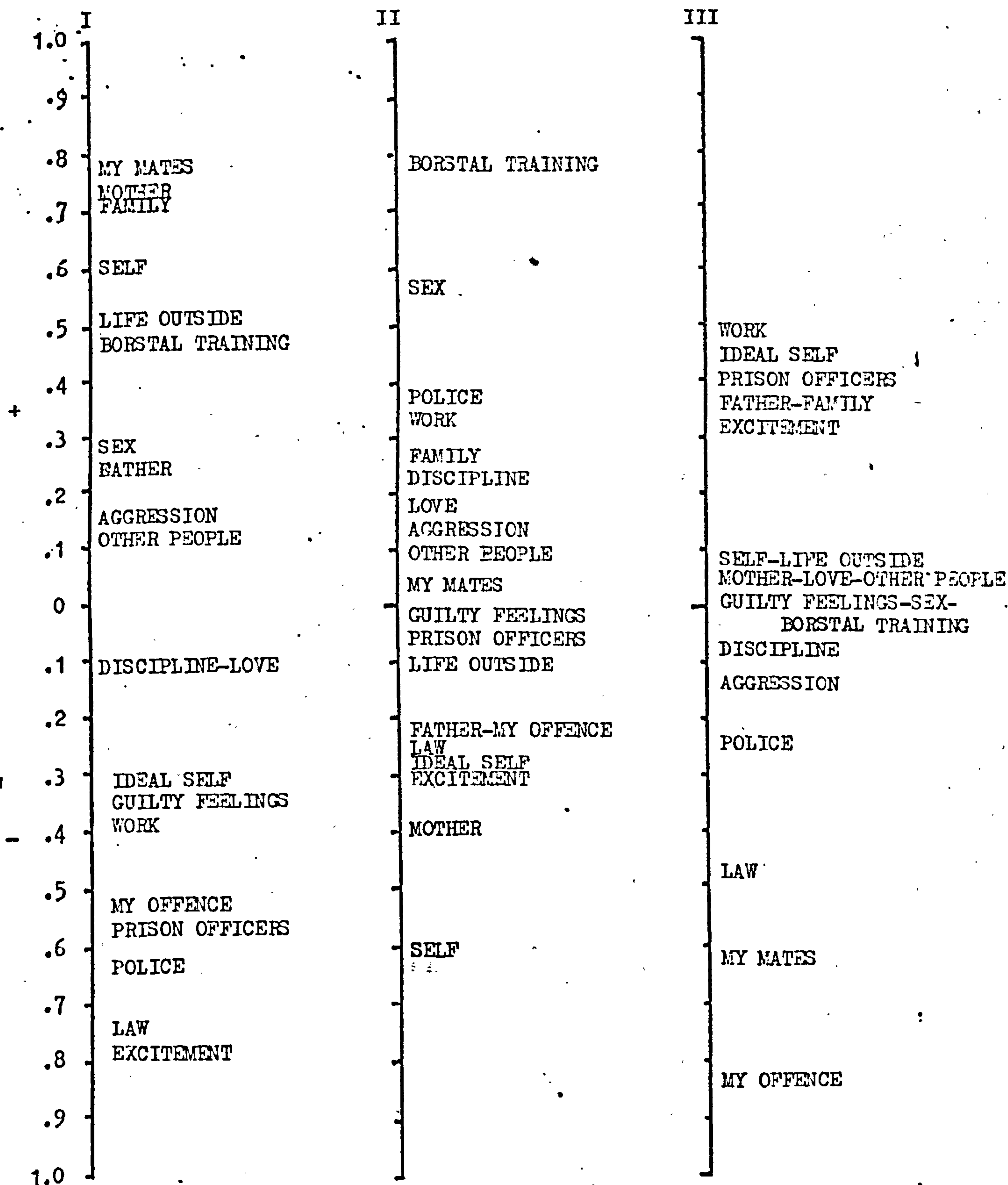
Bad, Ugly, Worthless, Cruel,
Awful, Unfair, Weak,
Rough, Slow.

CONSTRUCTS

Unpleasant, Strong, Hard,
Rugged, Masculine, Fast,
Tense.

CONSTRUCTS

Negative, Intense,
Active, Complex.



Good, Beautiful, Useful,
Kind, Nice, Fair, Strong,
Smooth, Fast.

Pleasant, Weak, Soft,
Delicate, Feminine, Slow,
Relaxed.

Positive, Mild,
Passive, Simple.

ELEMENT DISPERSION: LOADINGS ON THREE COMPONENT WITH CONSTRUCTS

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